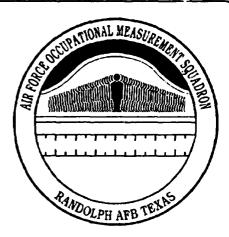




UNITED STATES
AIR FORCE



OCCUPATIONAL SURVEY REPORT

AIRBORNE COMMUNICATIONS SYSTEMS AND AIRBORNE COMMAND AND CONTROL COMMUNICATIONS EQUIPMENT

AFSCs 1A3X1/1A5X2

AFPTS 90-116-999 AND 90-118-001 SEPTEMBER 1994



(Note)

OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
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PREFACE

This report presents the results of an Air Force Occupational Survey of the Airborne Communication Systems Operator (AFSC 1A3X1, formerly AFSC 116X0) and Airborne Command and Control Communications Equipment (AFSC 1A5X2, formerly AFSC 118X1) career ladders. These career ladders are in the process of a merger, with an effective completion date of 1 November 1995. Authority to conduct occupational surveys is contained in AFI 36-2623. Computer products used in this report are available for use by operations and training officials.

Captain Ty K. Sills, Occupational Analyst, developed the survey instrument, analyzed the data, and wrote the final report. Ms. Rebecca R. Hernandez provided computer programming support, and Ms. Tamme Lambert provided administrative support. Major Randall C. Agee, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS), reviewed and approved this report for release.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to the AFOMS, Attention: Chief, Occupational Analysis Flight (OMY), 1550 5th Street East, Randolph AFB, Texas 78150-4449 (DSN 487-6623).

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SUMMARY OF RESULTS

- 1. <u>Survey Coverage</u>: The Airborne Communications Systems (AFSC 1A3X1, formerly AFSC 116X0) and Airborne Command and Control Communications Equipment (AFSC 1A5X2, formerly AFSC 118X1) career ladders were surveyed to obtain current task and equipment data for use in examining training programs. Survey results are based on responses from 318 AFSC 1A3X1 personnel (54 percent of the assigned population) and 51 AFSC 1A5X2 personnel (38 percent of the assigned population).
- 2. <u>Career Ladder Structure</u>: Structure analysis identified 10 jobs: VIP Support Communications Operator, European Theater VIP Support Communications Operator, Special Air Missions Communications Operator, Worldwide Airborne Resources (WABRES) Voice Communications Operator, WABRES Data Communications Operator, Air Deployment Control (ADC) Communications Operator, AWACS Communications Operator, Special Operations Communications Operator, Communications Technician, and Headquarters Staff. This analysis reveals a clear distinction between the two specialties, as nearly all AFSC 1A5X2 respondents grouped in the Communications Technician job.

3. Career Ladder Progression:

- a. AFSC 1A3X1 Career Ladder: Members of the AFSC 1A3X1 career ladder follow somewhat of an atypical career ladder progression. The majority of personnel across all jobs, with the exception of the Headquarters Staff job, perform mission-oriented technical functions. Even 9-skill level personnel spend over 70 percent of their time performing technical tasks. Analysis reveals, however, that more advanced personnel are generally assigned to high visibility VIP Support jobs, while junior personnel are more often linked to WABRES and AWACS duties. AFMAN 36-2108 Specialty Descriptions are accurate.
- b. AFSC 1A5X2 Career Ladder: Personnel in the AFSC 1A5X2 career ladder also follow an atypical career ladder progression pattern. Since this is a small, highly specialized career field, incumbents across all skill levels spend the majority of their time performing technical functions. Supervisory functions increase slightly with skill-level progression, but even the most senior personnel spend over 80 percent of their time performing technical duties. AFMAN 36-2108 Specialty Descriptions are accurate.
- 4. <u>Training Analysis</u>: Survey data were matched to the proposed new 1A3X1 STS. Because this document contained a myriad of both operator and maintenance technician functions, numerous areas were unsupported by criterion group survey data, and numerous tasks went unreferenced. For these reasons, the training extracts associated with this study should be carefully examined to determine the effectiveness of the proposed training document. The POIs for both career fields were analyzed and proved to be somewhat general in nature, but nevertheless sound.

- 5. <u>Job Satisfaction Analysis</u>: For the most part, members of both career ladders appear relatively satisfied with their jobs, although job satisfaction ratings were lower than those of comparison groups. First-enlistment personnel in both career fields exhibited much lower levels of satisfaction than their counterparts, as did members of the WABRES Voice Communications Operator and Headquarters Staff jobs. Career ladder managers should review these areas to determine possible causes and corrections.
- 6. <u>Implications</u>: The AFSC 1A3X1 and 1A5X2 career ladders are in the process of a merger, expected to be completed by 1 November 1995. Training personnel and career field managers should examine the data presented in this report, along with accompanying training documents, and use them to aid in the merger process.

OCCUPATIONAL SURVEY REPORT (OSR) AIRBORNE COMMUNICATIONS SYSTEMS OPERATOR CAREER LADDER AFSC 1A3X1 (FORMERLY AFSC 116X0) AND

AIRBORNE COMMAND AND CONTROL COMMUNICATIONS EQUIPMENT CAREER LADDER AFSC 1A5X2 (FORMERLY AFSC 118X1)

INTRODUCTION

This is a report of an occupational survey of the Airborne Communications Systems Operator (AFSC 1A3X1) and Airborne Command and Control Communications Equipment (AFSC 1A5X2) career ladders conducted by the Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS). These career ladders are currently undergoing a merger. This survey will ensure current data for use in updating career ladder documents and training programs associated with the pending merger.

Background

AFSC 1A3X1 Career Ladder

The Airborne Communications Systems Operator career ladder 3- and 5-skill level members operate and perform preflight, in-flight, and postflight inspections of various airborne communications systems. Several of these systems include data link, satellite communications, and encryption systems. Their primary function is to ensure that optimum in-flight communications are available in a variety of missions from VIP support to surveillance operations. In addition to performing technical airborne communications duties, 7-skill level members perform an increased number of training duties to include evaluating and determining training requirements.

Personnel at the 9-skill level, along with Chief Enlisted Managers (CEM code), manage the career field and act as primary supervisors. Along with these upper level functions, however, they perform many technically oriented tasks.

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Entrants into the AFSC 1A3X1 career ladder must complete two resident training courses, located at different bases. First, they attend the Enlisted Aircrew Undergraduate J3AQR11010-000 course at Sheppard AFB TX. This is a 2-week, 4-day course that provides an introduction to responsibilities of aircrew members.

The second course is the 6-week, 5-day Apprentice Airborne Communications Systems Operator course at Keesler AFB MS (E3ABR1A3X1-000). This course teaches the operation of airborne radio and teletype systems and the transcription of radio messages, as well as the theory and operation of airborne communications systems. Entry into this career ladder currently requires a General Armed Forces Vocational Aptitude Test Battery (ASVAB) score of 43 and a Strength Factor of "G" (weight lift of 40 lbs).

AFSC 1A5X2 Career Ladder

The Airborne Command and Control Communications career ladder 3- and 5-skill level members are responsible for maintaining airborne communications systems to include operating, monitoring, testing, troubleshooting, and repairing high frequency (HF), ultra-high frequency (UHF), very high frequency (VHF), and secure data and voice systems. Troubleshooting these, and other communications systems, often requires the use of built-in test equipment or other special support equipment. In addition to the above, 7-skill level members develop, supervise, and conduct training, as well as perform staff duties at the squadron level and above where aircrew experience is required.

Entrants into the AFSC 1A5X2 career ladder must complete three resident training courses, located at three different bases. First, they attend the Enlisted Aircrew Undergraduate J3AQR11010-000 course at Sheppard AFB TX. This is a 2-week, 4-day course that provides an introduction to responsibilities of aircrew members. The second course is the 15-week, 4-day Apprentice Airborne Command and Control Communications Equipment Specialist course at Keesler AFB MS (E3AQR1A5X2-001). This course teaches basic skills and knowledge of electronic principles, as well as specific E-3 airborne warning and control systems (AWACS) equipment fundamentals. The final course is an 11-week Communications Technician course located at Tinker AFB OK (E3000BQOTX-000). It is designed to train airborne communications technicians to perform maintenance of E-3 flight and mission crew communications and cryptographic equipment in an airborne environment. Entry into this career ladder currently requires an ASVAB score of 67 in Electronics and a Strength Factor of "G" (weight lift of 40 lbs).

Organization of This Report

The remainder of this OSR is organized into five major sections. The first will discuss survey methodology and information about the sample. Next, there is a section describing the job structure of the combined sample. That section is followed by two sections which address a number of issues separately for the two specialties included in this survey. Each section describes

progression through skill levels with implications for the AFM 36-2108 Specialty Descriptions, data relevant to training developers, and job satisfaction analyses. Finally, the IMPLICATIONS will draw inferences and highlight issues addressed in previous sections of the report.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) Air Force Personnel Test (AFPT) 90-116-999 and AFPT 90-118-001, dated January 1993. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, and tasks from previous applicable OSRs. The preliminary task list was refined and validated through personal interviews with 58 subject-matter experts (SMEs) at the following locations:

BASE	ORGANIZATION VISITED
Andrews AFB MD	89 OPG
Hurlburt AFB FL	HQ AFSOC
Keesler AFB MS	3400 TCHTS 3405 TCHTS 7 ACCS
Offutt AFB NE	1850 ACSQ
Tinker AFB OK	552 OSS 966 AWACTS

Others contacted included Air Force Military Personnel Center (AFMPC) classification personnel, functional and resource managers, and the Air Force Career Field Manager (AFCFM).

The resulting JI contains a comprehensive listing of 986 tasks grouped under 21 duty headings, with a background section requesting grade, job title, time in present job, time in service, job satisfaction, equipment maintained, and forms used.

Survey Administration

From June through November 1993, Military Personnel Flights at operational bases worldwide administered the inventory to all eligible DAFSC 1A3X1 and 1A5X2 personnel. Members eligible for the survey consisted of the total assigned population of both career fields, excluding the following: (1) hospitalized personnel; (2) personnel in transition for a permanent change of station; (3) personnel retiring within the time the inventories were administered to the field; and (4) personnel in their jobs less than 6 weeks. Participants were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the AFMPC, Randolph AFB TX.

Each individual who completed the inventory first filled in an identification and biographical information section and then checked each task performed in his or her current job. After checking tasks performed, each individual rated the tasks checked on a 9-point scale showing relative time spent on that task, compared to other tasks performed. The ratings ranged from 1 (very small amount time spent) to 9 (very large amount time spent).

To determine relative time spent for each task, all of the incumbent's ratings are assumed to account for 100 percent of time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time spent on each task.

Survey Sample

Personnel were selected to participate in this study so as to ensure an accurate representation across MAJCOMs and paygrades. Table 1 reflects the percentage distribution, by MAJCOM, of assigned and sampled individuals in AFSCs 1A3X1 and 1A5X2 as of June 1993. Survey results are based on responses from 318 AFSC 1A3X1 personnel (54 percent of the assigned population) and 51 AFSC 1A5X2 personnel (38 percent of the assigned population). The data show the assigned and sampled populations, based on the MAJCOM structures in place at the time of administration. The relatively low percentage of assigned personnel in the final sample is due to the heavy TDY workload of both career ladders at the time of the survey. Both career fields require extensive amounts of TDY, and, hence, a large sample is difficult to obtain. Despite the small percentages, however, Table 1 shows that the sample accurately represents the MAJCOM distribution. Table 2 reflects the percentage distribution by paygrade groups. The percentages show the sample accurately reflects the population at the E-4, E-6, and E-8 paygrade levels. The E-5 population, however, appears to be over sampled, while the E-1 to E-3 group has been under represented. The key factor to keep in mind is that the percentages are more sensitive because of the small population of both career fields. It is possible that junior personnel in both career fields spend more time TDY than their senior counterparts, and, hence, were not available The discrepancy between the paygrade sample representation and that of the population should be noted, but it does not seriously affect the validity or reliability of survey results.

TABLE 1

MAJCOM REPRESENTATION OF SAMPLE
AFSCs 1A3X1/1A5X2

COMMAND	PERCENT ASSIGNED (N=717)*	PERCENT OF SAMPLE (N=369)
ACC	66	67
AFSOC	11	10
4340	10	7
AMC	10	7
EUR	4	5
PACAF	4	3
OTHER	5	8

Total Assigned = 717
Total in Survey Sample = 369
Percent of Assigned in Sample = 51%

^{*} Assigned strength as of June 1993

TABLE 2 PAYGRADE DISTRIBUTION OF SAMPLE AFSCs 1A3X1/1A5X2

PAYGRADE	PERCENT ASSIGNED (N=717)*	PERCENT OF SAMPLE (N=369)
E-1 to E-3	38	11
E-4	27	28
E-5	19	30
E-6	13	15
E-7	3	12
E-8	-	4

⁻ Denotes less than 1 percent * Assigned strength as of June 1993

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information helps to complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 1A3X1 and AFSC 1A5X2 personnel (generally E-6 or E-7 craftsmen) also completed a second booklet for either training emphasis (TE) or task difficulty (TD). The TE and TD booklets were processed separately from the JIs. This information is used in a number of analyses discussed in more detail within this report.

Training Emphasis (TE). TE is defined as the degree of emphasis that should be placed on a task when first-enlistment personnel receive structured training on that task. Structured training is defined as resident technical schools, field training detachments, mobile training teams, formal on-the-job training (OJT), or any other organized training method. Forty-five experienced AFSC 1A3X1 and AFSC 1A5X2 NCOs rated the tasks in the inventory on a 10-point scale ranging from 0 (not important to train) to 9 (extremely important to train). In order for TE data to be reliable, sufficient rater agreement must exist. In this study, TE rater agreement wasn't obtained. In an attempt to obtain reliable data, each career ladder's rater responses were examined separately. The resultant groups still failed to yield sufficient agreement, and, hence, no TE data are reported in this survey. The lack of TE data is not a poor reflection of the reliability of the survey. It is quite common to obtain inadequate rater agreement in broad, mission oriented career ladders such as these.

<u>Task Difficulty (TD)</u>. TD is defined as an estimate of how much time the average airmen needs to learn to perform each task satisfactorily. Thirty-six experienced AFSC 1A3X1 and AFSC 1A5X2 supervisors rated each task's difficulty using a 9-point scale ranging from 1 (easy to learn) to 9 (very difficult to learn). Interrater agreement among these respondents was sufficiently high to combine TD ratings of both specialties. TD ratings are normally adjusted so tasks of average difficulty have a value of 5.00 and a standard deviation of 1.00. Any task with a difficulty of 6.00 or greater is considered difficult to learn.

When used in conjunction with the primary criterion of percent members performing, TD can provide insight into first-enlistment personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting Air Force specialty entry-level jobs.

SPECIALTY JOBS (Career Ladder Structure)

The first step in the analysis process is to identify the structure of career ladders in terms of jobs performed by respondents. The Comprehensive Occupational Data Analysis Programs (CODAP) assists by creating an individual job description for each respondent based on tasks

performed and relative amount of time spent on these tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, CODAP either adds new members to this initial group or forms new groups based on the similarity of tasks and time spent ratings.

The basic group used in the hierarchical clustering process is the <u>Job</u>. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a <u>Cluster</u>. The structure of the career ladder is then defined in terms of jobs and clusters of jobs.

Overview of Specialty Jobs

Based on the analysis of tasks performed and the amount of time spent performing each task, 10 jobs were identified within the surveyed career ladders. Figure 1 illustrates the jobs performed by AFSC 1A3X1 and AFSC 1A5X2 personnel.

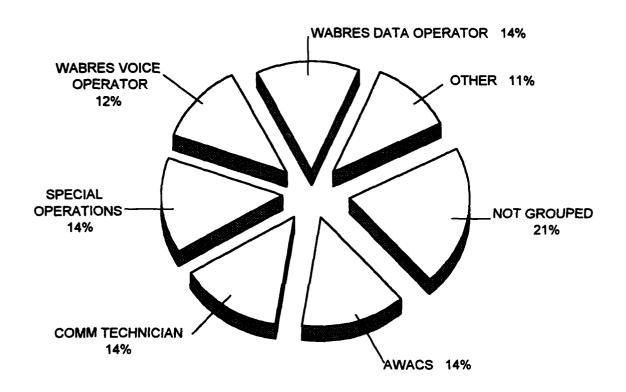


Figure 1

Other includes:

VIP Support - 4% Special Air Missions - 3% Air Deployment Control - 2% Headquarters Staff - 2% A listing of these jobs and job clusters is provided below. The stage (STG) number shown beside each title references computer-printed information, the letter "N" represents the number of personnel in each group.

- I. VIP SUPPORT COMMUNICATIONS OPERATOR (STG99, N=12)
- II. EUROPEAN THEATER VIP SUPPORT COMMUNICATIONS OPERATOR (STG54, N=5)
 - III. SPECIAL AIR MISSIONS COMMUNICATIONS OPERATOR (STG117, N=11)
 - IV. WABRES VOICE COMMUNICATIONS OPERATOR (STG60, N=44)
 - V. WABRES DATA COMMUNICATIONS OPERATOR (STG66, N=50)
- VI. AIR DEPLOYMENT CONTROL (ADC) COMMUNICATIONS OPERATOR (STG67, N=7)
 - VII. AWACS COMMUNICATIONS OPERATOR (STG80, N=51)
 - VIII. SPECIAL OPERATIONS COMMUNICATIONS OPERATOR (STG127, N=50)
 - IX. COMMUNICATIONS TECHNICIAN (STG63, N=52)
 - X. HEADQUARTERS STAFF (STG34, N=7)

The respondents forming these groups account for 79 percent of the survey sample. The remaining 21 percent were performing tasks which did not group with any of the other defined jobs. Many of these respondents have been in the career field for a short amount of time and perform only a limited number of tasks. It is anticipated that, with more experience, these personnel would group with one of the identified jobs.

Group Descriptions

The following paragraphs contain brief descriptions of the 10 jobs identified through career ladder structure analysis. Appendix A lists representative tasks performed by identified job groups. Table 3 displays time spent on duties, while Table 4 provides demographic information for each job discussed within this report.

TABLE 3

TIME SPENT ACROSS DUTIES BY CAREER LADDER JOBS (RELATIVE PERCENT OF TIME SPENT)

			EURO	SPEC		
		ΛIP	THIR VIP	AIR	WABRES	WABRES
		SUPPORT	SUPPORT	MISSIONS	VOICE	DATA
		COMM	COMIM	COMM	COMM	COMIM
		OPERATOR	OPERATOR	OPERATOR	OPERATOR	OPERATOR
2	DUTIES	(N=12)	(N=5)	(N=11)	(N=44)	(N=50)
∢	ORGANIZING AND PLANNING	S	œ	4	٣	٣
8	DIRECTING AND IMPLEMENTING	2	~	2	2	2
ပ	INSPECTING AND EVALUATING	7	4	· 60	2	7
Ω	TRAINING	•	7	4		•
田	PERFORMING ADMINISTRATIVE AND SUPPLY ACTIVITIES	7	· ∞	4	. c c	. 0
ഥ	PERFORMING PREMISSION TASKS	10	11	7	∞	9
Ö	PERFORMING PREFLIGHT AND ENROUTE OUTBOUND TASKS	15	13	17	13	11
I	PERFORMING ON STATION ACTIVITIES	15	12	12	22	17
-	PERFORMING THRUFLIGHT INSPECTIONS	4	7	9	8	m
_	PERFORMING ENROUTE INBOUND, BEFORE LEAVING AIRCRAFT, AND					
	POSTMISSION ACTIVITIES	6	7	9	10	00
¥	PERFORMING GENERAL AIRBORNE MAINTENANCE ACTIVITIES	9	7	15	4	6
-1	PERFORMING AIR FORCE SATELLITE COMMUNICATIONS (AFSATCOM)	*	•	•	7	14
Σ	MAINTAINING COMMUNICATION DISTRIBUTION SYSTEMINTERPHONE					
	SYSTEMS	•	•	•	•	•
Z	MAINTAINING HIGH FREQUENCY (HF), VERY HIGH FREQUENCY					
	(VHF) AND ULTRA HIGH FREQUENCY (UHF) SYSTEMS	9	6	7	\$	
0	MAINTAINING SECURE VOICE SYSTEMS	m	6	m	4	-
Д,	MAINTAINING DIGITAL INFORMATION LIFTKS	0	0	0	0	•
0	PERFORMING TACTICAL BATTLE MANAGEMENT SYSTEMS (TBMS)					
	AND AN/USC-48 CAPSULE MAINTENANCE		•	•	*	-
~	MAINTAINING MISCELLANEOUS COMMUNICATIONS	7	•	m	*	3
တ	PERFORMING CREW DUTTES	7	7	~	4	4
Ĺ	PERFORMING MOBILITY ACTIVITIES	_	_	•	_	_
ם	PERFORMING ALERT DUTY ACTIVITIES	1	0	•	9	7

* Denotes less than 1 percent

NOTE: Columns may total less than 100 percent due to rounding

TABLE 3 (CONTINUED)

TIME SPENT ACROSS DUTIES BY CAREER LADDER JOBS (RELATIVE PERCENT OF TIME SPENT)

DUTES		AIR DPLMT CONTROL COMM OPERATOR (N=7)	AWACS COMM OPERATOR (N=51)	SPECIAL OPS COMM OPERATOR (N=50)	COMM TECH (N=52)	HQ STAFF (N=7)
AWOUMFOHL XTX X OFO XX	ORGANIZING AND PLANNING DIRECTING AND IMPLEMENTING INSPECTING AND IMPLEMENTING INSPECTING AND EVALUATING TRAINING TRAINING PERFORMING PREMISSION TASKS PERFORMING PREFLIGHT AND ENROUTE OUTBOUND TASKS PERFORMING PREFLIGHT AND ENROUTE OUTBOUND TASKS PERFORMING PREFLIGHT INSPECTIONS PERFORMING ON STATION ACTIVITIES PERFORMING ENROUTE INBOUND, BEFORE LEAVING AIRCRAFT, AND POSTMISSION ACTIVITIES PERFORMING GENERAL AIRBORNE MAINTENANCE ACTIVITIES PERFORMING GENERAL AIRBORNE MAINTENANCE ACTIVITIES PERFORMING GENERAL AIRBORNE MAINTENANCE ACTIVITIES MAINTAINING COMMUNICATION DISTRIBUTION SYSTEMS MAINTAINING SECURE VOICE SYSTEMS MAINTAINING BIGITAL INFORMATION LINKS PERFORMING TACTICAL BATTLE MANAGEMENT SYSTEMS (TBMS) AND ANVUSC-48 CAPSULE MAINTENANCE MAINTAINING CREW DUTIES	4 m d m 9 2 2 4 m - 1 9 2 0 + 0 2 0	27-64-C-62-2 84-1	477m9051m 54+ + rm+	8 7 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
_	PERFORMING ALERT DUTY ACTIVITIES PERFORMING ALERT DUTY ACTIVITIES	7 •		7 -	- •	+ 0

* Denotes less than 1 percent

NOTE: Columns may total less than 100 percent due to rounding

TABLE 4

SELECTED BACKGROUND DATA ON PERSONNEL IN CAREER LADDER JOBS

	VIP SUPPORT COMM OPERATOR	EURO THTR VIP SUPPORT COMM OPERATOR	SPEC AIR MISS COMM OPERATOR	WABRES VOICE COMM OPERATOR	WABRES DATA COMM OPERATOR
NUMBER IN GROUP PERCENT OF TOTAL SAMPLE PERCENT IN CONUS	12 3% 75%	5 1% 0%	11 3% 100%	44 12% 100%	50 14% 100%
DAFSC DISTRIBUTION:					
1A331	%0	%0	%0	%0	10%
1A351	33%	%0	%0	%89	%09
1A371	20%	%08	73%	32%	79%
1A391	17%	70%	18%	%0	7%
1A300	%0	%	% 6	%0	7%
1A532	%	%0	%0	%0	%0
1A552	%	%0	%0	%0	%0
1A572	%0	%0	%0	%0	%0
PAYGRADE DISTRIBUTION:					
AIRMAN	%0	%0	%0	16%	10%
E-4	%0	%0	%0	34%	44%
E-5	33%	%09	%6	27%	32%
E-6	25%	20%	27%	20%	%8
E-7	42%	70%	25%	2%	7%
E-8	%	%0	% 6	%0	4%
E-9	%0	%0	%0	%0	%0
AVERAGE MONTHS IN PRESENT JOB	54	40	45	43	46
AVERAGE MONTHS TAFMS	132	113	144	92	75
PERCENT FIRST ENLISTMENT	%0	20%	%0	23%	24%
PERCENT SUPERVISING	20%	40%	36%	48%	48%
AVERAGE NUMBER OF TASKS PERFORMED	225	121	375	157	176

SELECTED BACKGROUND DATA ON PERSONNEL IN CAREER LADDER JOBS

	AIR DPLMT CONTROL COMM OPERATOR	AWACS COMM OPERATOR	SPECIAL OPS COM,M OPERATOR	COMM	HQ STAFF
NUMBER IN GROUP PERCENT OF TOTAL SAMPLE PERCENT IN CONUS	7 2% 100%	51 14% 78%	50 14% 72%	52 14% 85%	7 2% 100%
DAFSC DISTRIBUTION:					
1A331	%0	%9	%0	4%	%0
1A351	43%	57%	36%	4 9	% S
1A371	\$7% %	29% 8%	54% 6%	% 7	43% 14%
18391	%	%	5%	%	29%
1A532	%0	%0	%0	21%	%0
1A552	%0	%0	%0	33%	%0
1A572	%0	%0	2%	37%	14%
PAYGRADE DISTRIBUTION:					
AIRMAN	%0	%01	%0	19%	%0
E-4	14%	22%	14%	23%	%0
E-5	43%	42%	40%	31%	%0
E-6	76%	14%	76%	15%	%0
E-7	14%	%8	14%	10%	71%
E-8	%0	4%	%9	2%	14%
E-9	% 0	%0	% 0	%0	14%
AVERAGE MONTHS IN PRESENT JOB	33	41	43	32	30
AVERAGE MONTHS TAFMS	92	85	116	9/	212
PERCENT FIRST ENLISTMENT	14%	18%	4%	767	%0
PERCENT SUPERVISING	21%	43%	34%	29%	43%
AVERAGE NUMBER OF TASKS PERFORMED	148	190	294	569	44

Another way to illustrate these jobs is to summarize tasks performed into groups of tasks (task modules (TMs)). This allows for a concise display of tasks where job incumbents spend most of their time and develops a comprehensive overview of each job. The display shows the number of tasks included in a module, the average percent time spent on that module, a cumulative amount of time spent on the listed modules, and finally, an average percent members performing the particular TM. These modules were identified through CODAP coperformance clustering, which calculates the probability that members who perform one task will also perform a second task or group of related tasks. Representative TMs are listed as part of the job description. The list of sodules, with respective tasks, is presented in Appendix B.

I. VIP SUPPORT COMMUNICATIONS OPERATOR (STG99). The 12 members of this job represent only 3 percent of the survey sample. This is one of three jobs that involves VIP support functions. Members of these jobs are responsible for ensuring continuous air-ground communications links, including clear or secure record communications and phone patches, are available to any person or agency anywhere in the world at all times while airborne. These communications are provided via HF, UHF-FM satellite, and VHF-FM with ground or airborne facilities. The majority of members are assigned to Andrews AFB MD and perform duties aboard C-20 aircraft. The work related to the job involves performing routine communications operator functions, as well as working with SATCOM systems and handling classified material.

VIP SUPPORT COMMUNICATION OPERATOR	NS
Number of members	12
Percent of total sample	3%
Average number of tasks performed	225
Average TAFMS	132 mos
Predominant DAFSC	1A371
Predominant paygrade	E-7

Representative tasks performed by members of this job include:

initiate or process phone patches
operate airborne communications transceivers
maintain listening watches
inventory COMSEC material
operationally check aircraft HF transceivers
document destruction of classified materials or documents
perform preflight inspections of secure voice systems
coordinate flight information with Mystic Star HF networks

Representative TMs also show personnel in this job perform general operator duties, along with HF/UHF, classified, and SATCOM functions. Representative TMs include:

		No. of	Percen	t Time Spent	Average Percent Members
<u>TM</u>	Module Title	<u>Tsks</u>	(Sum)	(Cumulative)	<u>Performing</u>
0007	Routine on station duties	4	3	3	88
0003	Ops check/preflight comm equipment	2	1	4	96
0002	Operating comm equipment	3	2	6	8 6
0001	Handling classified material	4	4	10	93
0004	Ops check HF/UHF equipment	6	3	13	90
0013	Information coordination	6	3	16	89
0010	Premission duties	5	2	18	83
0016	Maintaining SATCOM equipment	10	4	22	88
8000	Handling COMSEC	5	2	24	83
0009	Preflight/postflight duties	4	2	26	73
0005	Power down HF/UHF equipment	2	1	27	88

The VIP Support Communications Operator job members have slightly more experience than the European Theater VIP Support Communications Operator personnel and perform an average of 104 more tasks. They are not, however, as experienced as the Special Air Missions job incumbents, who average 1 more year experience and perform a broader range of duties (see Table 4).

II. EUROPEAN THEATER VIP SUPPORT COMMUNICATIONS OPERATOR (STG54). The five members of this job represent only 1 percent of the survey sample, the smallest of the three VIP support jobs. Like their VIP support counterparts, personnel in this job provide distinguished visitor (DV) aircraft with continuous communications links anywhere in the world at all times. This includes controlling all communications to and from the airplane, as well as all intraplane communications. All five members are assigned to Ramstein AB GE and perform duties aboard C-20 aircraft. The work related to this job is comprised of basic communications operator duties. Specific duties relate to handling classified material and working with cryptographic systems.

EUROPEAN THEATER VIP						
SUPPORT COMMUNICATIONS						
OPERATOR						
Number of members	5					
Number of members						
Percent of total						
sample	1%					
Average number of						
tasks performed	121					
Average TAFMS	113 mos					
Predominant DAFSC	1A371					
Predominant paygrade	E-5					

Representative tasks performed by members of this job include:

maintain listening watches
maintain mission narrative logs
perform preflight inspections of secure voice systems
arrange for lodging or transportation of crewmembers
operationally check KY-58 cryptographic systems
load codes in KY-58 cryptographic systems
load identification friend or foe (IFF) codes
operationally check SATCOM systems

Representative TMs show members work primarily with HF/UHF equipment and are likely to work with cryptographic systems and handle classified materials. Representative TMs include:

		No. of	Perce	nt Time Spent	Average Percent Members
<u>TM</u>	Module Title	<u>Tsks</u>	(Sum)	(Cumulative)	Performing
0004	Ops check HF/UHF equipment	6	4	4	80
0007	Routine on station tasks	4	2	6	60
0006	Cryptographic systems duties	5	3	9	60
0001	Handling classified material	7	4	13	66
0011	Maintaining HF/UHF equipment	4	2	15	55
0003	Ops check/preflight comm				
	equipment	2	1	16	60
0005	Power down HF/UHF equipment	2	1	17	50
0016	Maintaining SATCOM equipment	10	5	22	54
0010	Premission duties	5	2	24	56
0023	Maintaining support materials	10	4	28	46

This is the most specialized of the 3 VIP support jobs, as members perform an average of only 121 tasks, 104 fewer than the VIP Support Communications Operator job and 254 fewer than the Special Air Missions personnel. The members of this job are also the most junior of the three groups, as they average only 113 months' TAFMS and carry a predominant paygrade of E-5.

III. SPECIAL AIR MISSIONS COMMU-NICATIONS OPERATOR STG117). members of this job represent 3 percent of the survey sample. They differ from their VIP support counterparts as they all perform duties aboard VC-137 aircraft rather than C-20 aircraft. These incumbents are responsible for the preflight and en route maintenance of all avionics systems, and communications systems in the aircraft and, hence, perform an average of 375 tasks. This is a high visibility job, as members support missions involving the President, Vice President, Cabinet Members, and other high ranking dignitaries. While en route, they are responsible to the aircraft commander for all oceanic position reports, en route weather information, departure and arrival reports, and phone patches to various command agencies.

SPECIAL AIR MISSIONS COMMUNICATIONS OPERATOR					
Number of members	11				
Percent of total					
sample	3%				
Average number of					
tasks performed	375				
Average TAFMS	144 mos				
Predominant DAFSCs	1A371				
Predominant paygrade	E-7				

Representative tasks performed by members of this job include.

coordinate flight information with White House communications center provide physical security for classified material coordinate flight information with Mystic Star HF networks operationally check aircraft HF transceivers operationally check radio teletype equipment prepare messages using White House format prepare AETC radio communications procedures perform preflight inspections of secure data systems operationally check aircraft radio compasses

Representative TMs show members perform maintenance as well as operator duties, as they maintain SATCOM equipment, facsimile systems, teletype equipment, and HF/UHF equipment.

Representative TMs include:

		No. of	Percer	nt Time Spent	Average Percent Members
<u>TM</u>	Module Title	<u>Tsks</u>	(Sum)	(Cumulative)	Performing
0004	Ops check HF/UHF equipment	6	2	2	94
0002	Operating comm equipment	3	1	3	97
8000	Handling COMSEC	5	2	5	87
0003	Ops check/preflight comm equipment	2	1	6	82
0016	Maintaining SATCOM equipment	10	3	9	95
0069	Preflight flight equipment	10	3	12	94
0029	Coordinating inflight information	9	2	14	86
0065	Maintaining facsimile systems	5	1	15	89
0051	Operating/maintaining teletype				
	equipment	11	3	18	80
0001	Handling classified material	7	2	20	83
0013	Information coordination	6	1	21	80
0011	Maintaining HF/UHF equipment	4	1	22	75
0007	Routine on station duties	4	1	23	70
0017	Operationally checking VHF equipment	10	2	25	82
0067	Coordinating with diplomatic agencies	6	1	26	70

In addition to performing communications operator duties, Special Air Missions personnel are required to perform numerous communications maintenance duties. Table 3 shows they spend 15 percent of their time performing General Airborne maintenance duties, far more than any other Communications Operator job group. Next to the HQ Staff personnel, they are the most experienced group of incumbents in the sample.

IV. WABRES VOICE COMMUNICATIONS OPERATOR (STG60). The 44 members of this job represent 12 percent of the survey sample and comprise 1 of 2 jobs relating to Worldwide Airborne Resources WABRES personnel provide national (WABRES). command authorities (NCA), the Joint Chiefs of Staff (JCS), and the Commanders in Chief (CINC) of appropriate unified commands with command, control, and communications capability during the pre-, trans-, and post-attack phases of war. WABRES incumbents perform either voice or data operator functions aboard a fleet of EC-135 and E-4 aircraft. The Voice Operator incumbents set up and maintain the HF, VHF, UHF, and secure voice air-to-air/air-to-ground circuits used by the airborne battlestaff to exercise command and control functions. Some representative tasks performed by members of this job group are:

COMMUNICATION OPERATOR	ONS
Number of members	44
Percent of total sample	12%
Average number of tasks performed	157
Average TAFMS	70 mos
Predominant DAFSC	1A351
Predominant paygrades	E-4/E-5

WARRES VOICE

maintain radio operations logs operationally check aircraft HF transceivers inventory COMSEC material monitor scheduled voice broadcasts operate airborne communications transceivers perform preflight inspections of secure voice systems authenticate stations using challenge and reply systems operate airborne communications receivers

Representative TMs show emphasis on HF/UHF systems duties. They also indicate that members are likely to perform cryptographic systems duties and handle classified material.

Representative TMs include:

		No.		at Time Spent	Average Percent Members
<u>TM</u>	Module Title	<u>Tsks</u>	(Sum)	(Cumulative)	<u>Performing</u>
0002	Operating comm equipment	3	2	2	84
0006	Cryptographic systems duties	5	3	5	90
0007	Routine on station duties	4	3	8	85
0025	Maintaining stations on net	4	3	11	83
0004	Ops check HF/UHF equipment	6	4	15	81
0001	Handling classified material	7	4	19	79
0005	Power down HF/UHF equipment	2	1	20	81
0003	Ops check/preflight comm equipment	2	1	21	73
0024	General operator duties	7	4	25	78
0009	Preflight/postflight duties	4	2	27	66

The WABRES Voice Operators are the most junior members of the career ladder with an average of only 70 months' TAFMS and predominant paygrade of E-5. Most members hold the 5-skill level.

V. WABRES DATA COMMUNICATIONS OPERATOR (STG66). The 50 members of this job represent 14 percent of the survey sample and comprise the remainder of the WABRES support personnel. These members also perform work aboard EC-135 and E-4 aircraft. Data Communications Operators, however, deal with links used to originate and relay emergency action messages (EAMs) and other operational traffic. These links include low frequency (LF), very low frequency (VLF), HF, VHF, and UHF satellite circuits. In addition, members perform work in coordination with Air Force Satellite Communications (AFSATCOM) Systems.

WABRES DATA	A
COMMUNICATIO	NS
OPERATOR	
Number of members	50
Percent of total sample	14%
Average number of tasks performed	176
Average TAFMS	75 mos
Predominant DAFSCs	1A351
Predominant paygrades	E-4/E-5

Representative tasks performed by members of this job include:

inventory COMSEC material
log incoming or outgoing messages
transmit AFSATCOM messages
prepare AFSATCOM messages for transmission
maintain AFSATCOM wideband operations
prepare messages using automated digital information network
(AUTODIN) format
perform AFSATCOM operation equipment checks

Representative TMs include:

		No. of	Percer	nt Time Spent	Average Percent Members
<u>TM</u>	Module Title	<u>Tsks</u>	(Sum)	(Cumulative)	<u>Performing</u>
0001	Handling classified material	7	4	4	81
0010	Premission duties	5	3	7	73
0052	Performing AFSATCOM duties	22	11	18	86
0023	Maintaining support materials	10	5	23	71
0002	Operating comm equipment	3	1	24	74
0051	Operating/maintaining teletype				
	equipment	11	5	29	74

The strong emphasis on AFSATCOM duties can be easily seen through the representative tasks and TMs. Table 3 shows the WABRES Data Operators perform far more AFSATCOM duties than any other job group. WABRES Data Operators are the second most junior members of the career field next to the WABRES Voice Operators, and they predominantly hold paygrades E-4/E-5.

VI. AIR DEPLOYMENT CONTROL (ADC) COMMUNICATIONS OPERATOR (STG67). The seven members of this job group account for 2 percent of the survey sample. Six of the seven members are assigned to the 8 ADCS at Tinker AFB OK and work aboard EC-135 aircraft. The primary mission of ADC personnel is to provide the ACC Commander with the capability to exercise command and control of ACC. Air Force Readiness Command. and Air Force Atlantic forces during deployment, redeployment, and emergency operations. The work involved with this job includes dealing extensively with HF and UHF radio equipment. Incumbents establish and maintain HF and UHF voice links with fighter and tanker cells, command posts, and command and control stations. Members also transmit position reports, obtain clearances and weather reports, and initiate phone patches.

AIR DEPLOYMENT CONTROL (ADC) COMMUNICATIONS OPERATOR					
Number of members	7				
Percent of total					
sample	2%				
Average number of					
tasks performed	148				
Average time in					
present job	33 mos				
Average TAFMS	92 mos				
Predominant DAFSC	1A371				
Predominant paygrade	E-5				

Representative tasks performed by personnel in this job include:

operationally check aircraft HF transceivers provide physical security for COMSEC inventory COMSEC material maintain COMSEC material power down HF equipment power down UHF equipment provide physical security for classified material request time-of-landing weather forecasts

Representative TMs show a strong emphasis on HF/UHF systems functions, as well as COMSEC functions. Representative TMs include:

		No. of	Percer	nt Time Spent	Average Percent Members
<u>TM</u>	Module Title	<u>Tsks</u>	(Sum)	(Cumulative)	<u>Performing</u>
0005	Power down HF/UHF equipment	2	2	2	100
8000	Handling COMSEC	5	3	5	86
0004	Ops check HF/UHF equipment	6	4	9	74
0002	Operating comm equipment	3	2	11	71
0014	Debriefing activities	4	2	13	7 5
0009	Preflight/postflight duties	4	2	15	68
0007	Routine on station tasks	4	2	17	54
0001	Handling classified material	7	3	20	67
0010	Premission duties	5	2	22	60
0013	Information coordination	6	3	25	60
0003	Ops check/preflight comm equipment	2	1	26	57

Table 4 shows that incumbents perform an average of 148 tasks and average 92 months' TAFMS. Four of the seven members hold the 7-skill level, while the remaining three hold the 3-skill level.

VII. AWACS COMMUNICATIONS
OPERATOR (STG80). The 51 members of
the AWACS Communications Operator job
represent 14 percent of the career ladder. The
majority of incumbents are assigned to Tinker
AFB OK, and all perform work aboard E-3
aircraft. The AWACS mission is to provide
all-altitude surveillance, warning, and aircraft
control in tactical or air defense roles.
AWACS Communications Operators configure, monitor, and troubleshoot TADILA/Link 11 systems and perform a number of
duties related to cryptographic systems.

AWACS COMMUNICATIONS OPERATOR		
Number of members	51	
Percent of total sample	14%	
Average number of tasks		
performed	190	
Average TAFMS	85 mos	
Predominant DAFSC	1A351	
Predominant paygrade	E-5	

Representative tasks performed by members of this job include:

load codes in KY-58 cryptographic systems operationally check KY-58 cryptographic systems identify malfunctions within TADIL A/Link 11 systems operationally check KY-75 cryptographic systems

load codes in KY-75 cryptographic systems zeroize cryptographic equipment verify TADIL A/Link 11 system configurations load codes in KG-40 cryptographic systems

Representative tasks and TMs show a strong emphasis on cryptographic systems duties. Representative TMs include:

		No. of	Percent Time Spent		Average Percent Members
<u>TM</u>	Module Title	<u>Tsks</u>	(Sum)	(Cumulative)	<u>Performing</u>
0006	Cryptographic systems duties	5	3	3	96
0003	Ops check/preflight comm equipment	2	1	4	91
0005	Power down HF/UHF equipment	2	1	5	90
0002	Operating comm equipment	3	2	7	84
0001	Handling classified material	7	4	11	82
0004	Ops check HF/UHF equipment	6	3	14	81
0012	Monitoring comm equipment	4	2	16	74
0039	Maintaining digital information systems	22	10	26	80

AWACS Communications Operators are relatively junior to the career ladder as they average only 85 months' TAFMS and predominantly hold the E-5 paygrade. They perform an average of 190 tasks, and the majority of incumbents hold the 5-skill level.

VIII. SPECIAL OPERATIONS COMMUNI-CATIONS OPERATOR (STG127). The 50 members of this job represent 14 percent of the survey sample. The majority of incumbents are assigned to Hurlburt FLD FL and Eglin AFB FL and perform duties aboard C-130 aircraft. Four members are assigned to Patrick AFB FL and perform Air Rescue duties. The mission of Special Operations is long-range infiltration, resupply, and exfiltration of unconven-tional warfare forces and equipment. The Special Operations Communications is responsible Operator providing rapid and secure air-to-air. and air-to-ground communications in a high-threat, covert environment. To accomplish this, incumbents work extensively with HF, UHF/VHF, and cryptographic systems.

SPECIAL OPERAT COMMUNICATIONS O	
Number of members	50
Percent of total sample	14%
Average number of tasks performed	294
Average TAFMS	116 mos
Predominant DAFSC	1A371
Predominant paygrade	E-5

Representative tasks performed by personnel in this job are:

perform preflight inspections of secure voice systems operationally check aircraft HF transceivers inventory COMSEC material maintain radio operations logs load codes in KY-58 cryptographic systems operationally check aircraft VHF transceivers operationally check UHF transceivers operationally check secure communications equipment

The large number of representative TMs shows the broad nature of this job. Members are likely to work with classified material and perform many functions with HF/UHF and VHF communications equipment.

Representative TMs include:

		No. of	Dercer	nt Time Spent	Average Percent Members
<u>TM</u>	Module Title	<u>Tsks</u>	(Sum)	(Cumulative)	<u>Performing</u>
0006	Cryptographic systems duties	5	2	2	97
0004	Ops check HF/UHF equipment	6	2	4	94
0003	Ops check/preflight comm equipment	2	1	5	88
0001	Handling classified material	7	3	8	91
0007	Routine on station duties	4	1	9	89
8000	Handling COMSEC	5	2	11	91
0005	Power down HF/UHF equipment	2	1	12	92
0017	Operationally check VHF equipment	10	3	15	89
0009	Preflight/postflight duties	4	1	16	83
0002	Operating comm equipment	3	1	17	75
0011	Maintaining HF/UHF equipment	4	1	18	87
0029	Coordinating inflight information	9	3	21	80
0010	Premission duties	5	2	23	74
0015	Inspecting comm equipment	4	1	24	76
0034	Inspecting aircraft systems	5	1	25	76

Members show a moderate level of experience as they average 114 months' TAFMS. Table 4 shows they have a broad job, performing an average of 294 tasks. They predominantly hold the 7-skill level, and the majority of members are in paygrade E-5.

IX. COMMUNICATIONS TECHNI-CIAN (STG63). The 52 members of this group represent the AFSC 1A5X2 population of the survey sample. Communications Technicians provide maintenance support for selected communications operations. incumbents perform majority of iob maintenance functions aboard E-3 aircraft at Tinker AFB OK. A select group of NATO Communication Technicians assigned to Geilenkirchen AB GE also performs functions aboard the E-3, while another small group assigned to the 7 ACCS at Keesler AFB MS performs maintenance functions aboard C-130 aircraft. Communications Technicians spend a great deal of time maintaining HF, VHF, and UHF communications systems. Much of this

COMMUNICAT TECHNICIA	- "			
Number of members	52			
Percent of total sample 14%				
Average number of tasks performed	269			
Average TAFMS	76 mos			
Predominant DAFSC	1A552/1A572			
Predominant paygrades	E-4/E-5			

maintenance activity is spent troubleshooting components to the line replaceable unit (LRU) and removing and replacing faulty system components. NATO Communications Technicians spend more time associated with cryptographic systems and COMSEC than their maintenance counterparts. Communications Technicians assigned to the 7 ACCS work on equipment located within the AN/USC-48 ABCCC Capsule. Some of this equipment, such as optical disk drives, is unique to the Capsule, but incumbents still only spend 1 percent of their time working on capsule-unique tasks (see Table 3). Representative tasks performed by personnel in the job are:

perform joint tactical information data systems (JTIDS) initialization procedures operate JTIDS communications links operationally check UHF transceivers operationally check aircraft UHF transmitters perform checkouts of UHF equipment perform checkouts of HF equipment operationally check aircraft HF transceivers perform JTIDS equipment checkouts

The maintenance nature of this work is clearly shown through representative TMs, such as maintaining HF/UHF, JTIDS, SATCOM, and other general communications systems. Representative TMs include:

		No. of	Percer	nt Time Spent	Average Percent Members
<u>TM</u>	Module Title	<u>Tsks</u>	(Sum)	(Cumulative)	Performing
0004	Ops check HF/UHF equipment	6	3	3	95
0043	Operating/maintaining JTIDS equipment	8	3	6	90
0011	Maintaining HF/UHF equipment	4	2	8	97
0005	Power down HF/UHF equipment	2	1	9	88
0003	Ops check/preflight comm equipment	2	1	10	86
0034	Inspecting aircraft systems	5	2	12	84
0035	Operating/maintaining Have Quick				
	systems	16	6	18	81
0002	Operating comm equipment	3	1	19	84
0016	Maintaining SATCOM equipment	10	3	22	85
0012	Monitoring comm equipment	4	1	23	73
0020	General airborne maintenance duties	5	2	25	76
0017	Operationally checking VHF equipment	10	3	28	83

Communications Technicians generally perform maintenance functions; however, they also perform some Communications Operator duties and, hence, perform an average of 269 tasks. They average only 76 months' TAFMS and predominantly hold paygrades of E-4/E-5. It isn't surprising they are junior to most of their operator counterparts as they are in a smaller career field that merges with other aircrew specialties at the 9-skill level.

X. <u>HEADQUARTERS</u> <u>STAFF</u> (<u>STG34</u>). The seven members of this job account for 2 percent of the survey sample. The work performed in this job is narrow in scope, as incumbents spend 91 percent of their time performing supervisory, administrative, and training duties (see Table 3). Furthermore, they perform an average of only 44 tasks, the fewest of any group in the survey. Three respondents are assigned to Langley AFB VA, while the others are scattered in various HQ jobs.

HEADQUARTERS S	STAFF
Number of members	7
Percent of total sample	2%
Average number of	
tasks performed	44
Average TAFMS	212 mos
Predominant DAFSC	1A371
Predominant paygrade	E-7

Representative tasks performed by personnel in this job are:

plan or prepare briefings
determine work priorities
compile data for reports
conduct staff meetings or briefings
review publications, correspondence, or
reports
establish performance standards for subordinates
participate in upgrade or modifications of communications
systems equipment
evaluate communications operations

Representative TMs show the work is almost exclusively supervisory and administrative in nature, as 68 percent of incumbent's time is spent in the following two TMs:

<u>TM</u>	Module Title	No. of <u>Tsks</u>	Pe cer (Sum)	nt Time Spent (Cumulative)	Average Percent Members Performing
0046	Admin/supervisory duties	47	60	60	46
0057	Evaluating duties	9	8	68	37

As expected, this is the most senior group in the career ladder, as incumbents average 212 months' TAFMS. One of the five incumbents that holds the 7-skill level is a member of AFSC 1A5X2. The other two job members hold the 9- and 00-skill levels respectively.

Summary

In summary, career ladder structure analysis identified 10 mission-oriented jobs: VIP Support Communications Operator, European Theater VIP Support Communications Operator, Special Air Missions Communications Operator, WABRES Voice Communications Operator, WABRES Data Communications Operator, Air Deployment Control (ADC) Communications Operator, AWACS Communications Operator, Special Operations Communications Operator, Communications Technician, and Headquarters Staff. The AFSC 1A5X2 respondents are represented by the Communications Technician job.

TABLE 5

JOB SPECIALTY COMPARISON BETWEEN CURRENT AND PREVIOUS AFSC 1A3X1 OCCUPATIONAL SURVEYS

İ	CURRENT (N=369)	PERCENT IN GROUP		1986 (N=529)	PERCENT IN GROUP
	VIP Support	4	-	VIP Support	2
Ï	Special Air Missions	ဇ	11.	Special Air Missions	8
III.	Not Identified	•	II.	Aerospace Rescue and Recovery Service	∞
≥.	WABRES Voice Operator	12	₹.	Worldwide Airborne Command	47
	WABRES Data Operator	14		rost voice and Data Operator Cluster	
>	Air Deployment Control	7	>	Tactical Deployment Control	2
VI.	Not Identified	,	VI.	VI. Technical Training	7
VII.	AWACS Comm Operator	14	VII.	Command and Control Personnel	25
VIII.	Special Operations	14	VIII.	Not Identified	ı
X.	Headquarters Staff	2	Χ	Not Identified	•
×	Communications Technician	14	×	Not Surveyed	
XI.	Not.Grouped	21	XI.	Not Grouped	10

TABLE 6

JOB SPECIALTY COMPARISON BETWEEN CURRENT AND PREVIOUS AFSC 1A5X2 OCCUPATIONAL SURVEYS

i	CURRENT (N=369)	PERCENT IN GROUP		1988 (N=99)	PERCENT IN GROUP
l _:	III. Communications Technician	14	ij	I. E-3A Communications Maintenance Personnel Cluster	84
			II.	EC-130 Airborne Communications Technician	10
H.	Not Identified	•	III.	EC-135 Airborne Communications Technician	4
≥.	AFSC 1A3X1 Jobs	99	.	Not Surveyed	•
`	IV. Not Grouped	21	ij	II. Not Grouped	7

Comparison to Previous Survey

There are several differences between the jobs identified in the current and previous studies. For AFSC 1A3X1, these differences are listed in Table 5, and for AFSC 1A5X2, they are listed in Table 6. The previous AFSC 1A3X1 survey was published in 1988. The current study may appear different on the surface, but the results are actually quite similar. First of all, the job of Aerospace Rescue and Recovery Service (ARRS) was not identified in the current study. Several members of the Air Rescue job were identified, but were subsumed within the Special Operations job, which was not identified in the last survey. Members of both job groups work aboard C-130 aircraft and hence perform tasks similar enough to allow them to be grouped together. Furthermore, the ARRS job is not as widespread as it was in 1988. A small job that was identified in the last survey which didn't surface in the current analysis is the Technical School Instructor job. The technical school, located at Keesler, was sampled, but patterns of responses from incumbents were not distinct enough to establish a job. This was probably due to instructors marking tasks performed by a number of jobs, and thus, having job descriptions dissimilar to any identified job or to each other. A similar situation may have occurred with the previous survey as the Headquarters Staff personnel were not singled out.

The final difference involves the inclusion of AFSC 1A5X2 personnel in the current study. As anticipated, nearly all perform the Communications Technician job. Table 6 shows a comparison of the current AFSC 1A5X2 survey with the previous study published in 1988. The E-3A and EC-130 jobs were currently identified in the Communications Technician job. The EC-135 job no longer exists.

Specialty Job Satisfaction Analysis

An examination of job satisfaction indicators can give career managers a better understanding of factors that may affect job performance of career ladder airmen. Therefore, the survey booklet included questions about job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions.

Table 7 presents job satisfaction responses for clusters and job groups within the survey sample. All respondents, with the exception of the Headquarters Staff group, found their jobs interesting. HQ Staff personnel probably exhibit considerably less job interest, because they are assigned to a desk rather than an aircraft. WABRES Voice Operators don't feel their talents are utilized as well as their counterparts, but they, like all other job groups, feel that their training has been well utilized. The WABRES Voice and Data Operators, along with the HQ Staff incumbents, exhibit low senses of accomplishment reactions. Despite showing positive job satisfaction in all areas, the Special Air Missions personnel are the least likely to reenlist.

TABLE 7

COMPARISON OF JOB SATISFACTION INDICATORS FOR SPECIALTY JOB MEMBERS (PERCENT MEMBERS RESPONDING)

	COMFARASON OF JOB SATISTICAL MEMBER	OF 305 SALES (PER	CENT MEN	(PERCENT MEMBERS RESPONDING)	ONDING)					
	VIP SUPPORT COMM OPR	EURO THTR VIP SUPPORT COMM OPR	SPEC AIR MISS COMM OPR	WABRES VOICE COMM OPR	WABRES DATA COMM OPR (N=50)	AIR DPLMT CONTROL COMM OPR (N=7)	AWACS COMM OPR (N=51)	SPECIAL OPS COMM OPR (N=50)	COMM TECH (N=52)	HQ STAFF (N=7)
EXPRESSED JOB INTEREST:	(71-N)	(CA)								
Interesting So-So Dull	001	80 0 20	001	68 20 11	80 8 12	86 14 0	26 4 4	8 8 7	81 13 6	57 43 0
PERCEIVED USE OF TALENTS:										
Fairly Well to Excellent Little or Not at All	001	80 20	100 0	9 9 9	74	85 14	4 %	, 8	81 19	71 29
PERCEIVED USE OF TRAINING:										
Fairly Well to Excellent Little or Not At All	100	80 20	0 0	0 0	94	71 29	90 10	88 12	92 8	71 29
SENSE OF ACCOMPLISHMENT:										
Satisfied Neutral Dissatisfied	0 0	00000	0 0	48 27 25	36 36	71 41	82 6 12	88 9	81 8 12	57 0 43
REENLISTMENT INTENTIONS:										
Plan to Reenlist	75	100	55	20	&	98	26	%	75	17
Plan Not to Reenlist	0 5	0	6 %	50	0 0	1 0	<u>9</u> &	7 A	<u>~</u>	0 2
Plan to Retire No Response	0	00	ર ૦	0	<u>?</u> 0	, O	0	0	0	0

AFSC 1A3X1

Analysis of DAFSC Groups

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis examines differences in tasks performed between skill levels. This information may then be used to evaluate how well career ladder documents, such as AFMAN 36-2108 Specialty Descriptions, reflect what career ladder personnel are actually doing in the field.

The distribution of AFSC 1A3X1 skill-level groups across career ladder clusters and jobs is displayed in Table 8. As can be seen, personnel across skill levels perform a wide variety of jobs. This is a common pattern for AFSCs that exhibit breadth due to mission orientation and the requirement to support several different aircraft.

Table 9 offers another perspective by displaying relative time spent on duties across skill-level groups. These data point to a somewhat atypical career ladder progression. Members across all skill levels, except the CEM code personnel, spend the majority of their time performing the routine technical tasks in duties G and H. At the 7- and 9-skill levels, personnel begin to perform slightly more supervisory duties. Personnel at the DAFSC 1A391 level spend the majority of their time performing supervisory duties; however, they still spend a moderate amount of time performing tasks in technical duties G and H.

Skill-Level Descriptions and Comparisons

<u>DAFSC 1A533</u>. Three-skill level personnel tend to be assigned to the WABRES Data Communications Operator job and the AWACS Communications Operator job. The reason 11 of the 21 3-skill level personnel are not grouped is they are relatively inexperienced, performing basic tasks that will not allow them to group with their more experienced counterparts. They spend the majority of their time performing the routine technical tasks exhibited in duties G and H (see Table 9) and also spend considerably more time performing alert duties. This is probably due to the fact that they must participate in many practice alert exercises while learning a more advanced job. They average only 49 months' TAFMS and perform roughly 103 tasks on their jobs. Examples of tasks DAFSC 1A331 airmen are likely to perform include operating airborne communications receivers, destroying classified material, and performing alert crew changeovers. Other examples of common tasks performed by a majority of these airmen are shown in Table 10.

<u>DAFSC 1A553</u>. Five-skill level members perform a wide variety of jobs. The majority work in the WABRES or AWACS jobs (see Table 8). They spend the majority of their time performing technical tasks; however, they perform slightly more training functions and fewer alert duties than their junior counterparts. They average 88 months' TAFMS and an average of 157 tasks.

TABLE 8

DISTRIBUTION OF DAFSC 1A3X1 GROUP MEMBERS ACROSS CAREER LADDER JOBS (Percent)

CAREER	CAREER LADDER JOBS	1A331 (N=21)	1A351 (N=163)	1A371 (N=113)	1A391 (N=16)	1A300 (N=5)
L	VIP Support Comm Operator	0	2	ĸ	13	0
II.	European Theater VIP Support Comm Operator	0	0	4	9	0
Ш	Special Air Missions Comm Operator	0	0	7	13	0
IV.	WABRES Voice Comm Operator	0	18	12	0	0
>	WABRES Data Comm Operator	24	18	12	9	20
VI.	Air Deployment Control Comm Operator	0	7	4	0	0
VII.	AWACS Comm Operator	14	18	13	25	0
VIII.	Special Operations Comm Operator	0	Ξ	24	61	20
IX.	Comm Technician	10	_	*	0	0
×	Headquarters Staff	0	0	æ	9	09
	Not Grouped	52	30	16	12	0

* Denotes less than I percent

TABLE 9

TIME SPENT ON DUTIES BY MEMBERS OF AFSC 1A3X1 SKILL-LEVEL GROUPS (RELATIVE PERCENT OF JOB TIME)

DO	DUTIES	1A331 (N=21)	1A351 (N=163)	1A371 (N=113)	1A391 (N=16)	1A300 (N=5)
4		((•	(:
∢	ORGANIZING AND PLANNING	m	7	S	6	91
В	DIRECTING AND IMPLEMENTING	ю	7	4	9	Ξ
ပ	INSPECTING AND EVALUATING	1	_	3	7	13
Ω	TRAINING	_	4	4	4	9
Э	PERFORMING ADMINISTRATIVE AND SUPPLY ACTIVITIES	6	∞	7	9	7
Ľ.	PERFORMING PREMISSION TASKS	6	7	•	~	8
Ö	PERFORMING PREFLIGHT AND ENROUTE OUTBOUND TASKS	12	15	15	13	œ
Ξ	PERFORMING ON STATION ACTIVITIES	14	81	91	14	6
_	PERFORMING THRUFLIGHT INSPECTIONS	m	3	33	3	7
_	PERFORMING ENROUTE, INBOUND, BEFORE LEAVING AIRCRAFT,	∞	6	∞	9	4
	AND POSTMISSION ACTIVITIES					
×	PERFORMING GENERAL AIRBORNE MAINTENANCE ACTIVITIES	7	33	5	9	4
_	PERFORMING AIR FORCE SATELLITE COMMUNICATIONS (AFSATCOM)	2	\$	7		7
Σ	MAINTAINING COMMUNICATION DISTRIBUTION SYSTEM					
	INTERPHONE SYSTEMS		*	*		*
Z	MAINTAINING HIGH FREQUENCY (HF), VERY HIGH FREQUENCY					
	(VHF) AND ULTRA HIGH FREQUENCY (UHF) SYSTEMS	4	5	\$	4	7
0	MAINTAINING SECURE VOICE SYSTEMS	_	33	n	3	7
۵.	MAINTAINING DIGITAL INFORMATION LINKS	*		*		0
0	PERFORMING TACTICAL BATTLE MANAGEMENT SYSTEMS (TBMS)					
	AND AN/USC-48 CAPSULE MAINTENANCE	*	*	*	*	*
~	MAINTAINING MISCELLANEOUS COMMUNICATIONS	7	7	-	7	7
S	PERFORMING CREW DUTIES	7	9	\$	5	æ
۲	PERFORMING MOBILITY ACTIVITIES	7		-	*	*
n	PERFORMING ALERT DUTY ACTIVITIES	10	4	~	*	-

* Denotes less than 1 percent

REPRESENTATIVE TASKS PERFORMED BY 1A331 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=21)
H409	Operate airborne communications receivers	61
J542	Destroy classified materials or documents	61
U978	Identify Klaxon testing procedures	57
U980	Perform alert crew changeovers	57
J606	Zeroize cryptographic equipment	57
F243	Review FCIFs or mission crew information files (MCIFs)	52
U977	Identify Klaxon out procedures	52
U982	Practice alert force exercises	52
H411	Operate airborne communications transmitters	52
E176	Maintain mission narrative logs	52
E165	Maintain aircrew currency requirements	52
U979	Perform alert aircraft changeovers	52
F222	Inventory COMSEC material	52
J547	Perform before landing procedures	52
G321	Perform preflight inspections of circuit breaker panels	52
G322	Perform preflight inspections of communications consoles	52
U983	Practice alert reaction procedures	47
H410	Operate airborne communications transceivers	47
F199	Assemble professional or personal flight gear	47
E172	Maintain flight crew information files (FCIFs)	47
U972	Identify alert response routes	47
F231	Participate in premission briefings, other than conducting	47
G349	Perform preflight inspections of secure data systems	47
E174	Maintain logs of aircraft transmissions and receptions	47
J548	Perform before leaving aircraft procedures	47
E169	Maintain COMSEC materials	42
E168	Maintain communication kits	42
E164	Log incoming or outgoing messages	42
E167	Maintain circuit logs	42
S946	Stow crewmember gear on aircraft	42

Examples of tasks these airmen are likely to perform are found in Table 11. Some of the functions they perform include taking inventory of COMSEC material, zeroizing cryptographic equipment, and signing out classified material.

The tasks which best distinguish 5-skill level personnel from their junior counterparts are listed in Table 12. It is not surprising that only one task, identifying Klaxon testing procedures, is more often performed by 3-skill level personnel. The remaining technical tasks, more commonly performed by 5-skill level personnel, demonstrate the increased breadth of their jobs.

<u>DAFSC 1A573</u>. Seven-skill level personnel are much more likely to hold high visibility positions, such as VIP support jobs, than their junior counterparts. Table 8 shows that these members perform a wide variety of jobs across the career field to include a Headquarters Staff position. Personnel at this skill level still demonstrate a propensity to perform routine technical duties; however, they also perform slightly more supervisory duties than 5-skill level personnel. A clear distinction, however, does not appear to exist between the 7-skill level members and their junior counterparts. They average 176 months' TAFMS and perform an average of 221 tasks, 64 more than 5-skill level personnel.

Examples of tasks 7-skill level airmen are likely to perform are listed in Table 13. These tasks are primarily technical and involve duties such as operating and operationally checking airborne communications transceivers and transmitters.

The tasks which best differentiate 5- and 7-skill level airmen are listed in Table 14. Five-skill level airmen have much higher percentage performing alert duties, while 7-skill level airmen perform supervisory tasks.

<u>DAFSC 1A391</u>: Nine-skill level members, like their junior counterparts, perform a wide variety of jobs. They are more likely to perform high visibility jobs than WABRES jobs (see Table 8). This appears to be the main semblance of career ladder progression, as 9-skill level members still spend the majority of their time performing technical functions (see Table 9). They average 220 tasks on their job, roughly the same as 7-skill level personnel.

Members in the 9-skill level group participate in staff meetings, establish organizational policies, and evaluate common operations. Examples of other tasks they perform are listed in Table 15, while Table 16 shows the tasks which best differentiate these airmen from their junior counterparts are primarily administrative and supervisory in nature. It also shows that 7-skill level airmen are much more likely to perform duties associated with Have Quick systems.

<u>DAFSC 1A300</u>: The final skill-level group to examine is the DAFSC 1A300 personnel group. Table 8 shows that all five of these respondents, as expected, grouped in the Headquarters Staff job. These senior members of the career field primarily perform supervisory duties. Members still, however, spend approximately 44 percent of their time performing technical tasks (see Table 9). On average, they perform 233 tasks, more than any other DAFSC group.

REPRESENTATIVE TASKS PERFORMED BY 1A351 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=163)
F222	Inventory COMSEC material	84
J606	Zeroize cryptographic equipment	78
G367	Sign out classified material	75
H410	Operate airborne communications transceivers	72
G322	Perform preflight inspections of communications consoles	69
F221	Inventory communications kits	69
H409	Operate airborne communications receivers	69
J604	Turn in classified materials or documents	69
H411	Operate airborne communications transmitters	68
E169	Maintain COMSEC materials	66
F243	Review FCIFs or mission crew information files (MCIFs)	65
H483	Transmit and receive messages using secure communications equipment	65
J542	Destroy classified materials or documents	64
G288	Operationally check aircraft UHF transmitters	63
G299	Operationally check secure communications equipment	63
G351	Perform preflight inspections of secure voice systems	63
E163	Inventory lists of classified materials or documents	63
J596	Power down HF equipment	62
O790	Load codes in KY-75 cryptographic systems	62
H373	Authenticate stations using challenge and reply systems	62
J599	Power down UHF equipment	61
G283	Operationally check aircraft HF transceivers	61
O789	Load codes in KY-58 cryptographic systems	61
S941	Review aircraft flight or maintenance records, such as AFTO Forms 781	
	series forms	61
H400	Maintain radio operations logs	60
S939	Provide physical security for classified material	60
S943	Review normal or emergency destruction plans of COMSEC material	60
S940	Provide physical security for COMSEC	59
0794	Operationally check KY-75 cryptographic systems	58
G289	Operationally check aircraft ultra high frequency (UHF) receivers	58

TABLE 12

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 1A331 AND DAFSC 1A351 PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS		1A331 (N=21)	1A351 (N=163)	DIFFERENCE
N978	Identify Klaxon testing procedures	57	37	20
H373	Authenticate stations using challenge and reply systems	14	63	-49
G351	Perform preflight inspections of secure voice systems	61	64	45
H381	Encode messages manually	10	20	9
F221	Inventory communications kits	50	69	9
G299	Operationally check secure communications equipment	24	64	9
H380	Decode messages manually	01	49	-39
H496	Transmit voice communications traffic through HF equipment	14	53	-39
1596	Power down HF equipment	24	63	-38
H464	Set codes on cryptographic equipment	10	48	-38
0793	Operationally check KY-58 cryptographic systems	19	57	-38
0789	Load codes in KY-58 cryptographic systems	24	61	-37
G367	Sign out classified material	38	75	-37
JS 52	Perform checkouts of HF equipment	61	55	-36
0794	Operationally check KY-75 cryptographic systems	24	59	-35
1590	Perform postflight security checks	10	44	-34

REPRESENTATIVE TASKS PERFORMED BY 1A371 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=113)
H4 10	Operate airborne communications transceivers	85
G283	Operationally check aircraft HF transceivers	84
G263	Sign out classified material	83
G288	Operationally check aircraft UHF transmitters	8 2
O789	Load codes in KY-58 cryptographic systems	82
F222	Inventory COMSEC material	81
G351	Perform preflight inspections of secure voice systems	80
J606	Zeroize cryptographic equipment	78
0793	Operationally check KY-58 cryptographic systems	77
G321	Perform preflight inspections of circuit breaker panels	76
G299	Operationally check secure communications equipment	76
G322	Perform preflight inspections of communications consoles	76
H483	Transmit and receive messages using secure communications equipment	75
N763	Operationally check HF radio systems	74
J542	Destroy classified materials or documents	74
S940	Provide physical security for COMSEC	74
N765	Operationally check UHF radio systems	7 3
G289	Operationally check aircraft ultra high frequency (UHF) receivers	72
S939	Provide physical security for classified material	72
E150	Annotate cabinet, safe, or room security forms	71
E169	Maintain COMSEC materials	71
H409	Operate airborne communications receivers	71
G301	Operationally check UHF transceivers	71
J596	Power down HF equipment	71
E165	Maintain aircrew currency requirements	70
H411	Operate airborne communications transmitters	70
J604	Turn in classified materials or documents	70
F243	Review FCIFs or mission crew information files (MCIFs)	70
J552	Perform checkouts of HF equipment	70
E155	Document destruction of classified materials or documents	69

TABLE 14

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 1A351 AND DAFSC 1A371 PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS		1A351 (N=163)	1A371 (N=113)	DIFFERENCE
U979 U978	Perform alert aircraft changeovers Identify Klaxon testing procedures	53	31	22 20
U977 U982	Identify Klaxon out procedures Practice alert force exercises	37 48	19 31	18 17
U972	Identify alert response routes	37	21	16
U983	Practice alert reaction procedures	42	27	15
			; ; ; ; ; ; ; ; ; ; ;	
A 4	Compile data for reports	8	57	-39
A16	Establish organizational policies, such as operating instructions (OIs) or standard operating			
	procedures (SOPs)	6	43	-34
B60	Interpret policies, directives, or procedures for subordinates	15	49	-34
E187	Participate in staff meetings, other than conducting	28	61	-33
A17	Establish performance standards for subordinates	15	47	-32
F213	Coordinate mission requirements with appropriate agencies	33	65	-32
A23	Plan communications support for special missions	27	58	-31
E197	Review publications, correspondence, or reports	11	42	-31
D132	Evaluate effectiveness of upgrade training	\$	35	-30
B58	Initiate actions required due to substandard performance of personnel	14	44	-30
A8	Determine work priorities	28	58	-30
B44	Direct operations of airborne communications platforms	13	42	-29
G284	Operationally check aircir	13	42	-29
F220	Identify Flight Information Regions (FIRs) to be traversed	12	40	-28
N766	Operationally check VHF/AM radio systems	28	98	-28

REPRESENTATIVE TASKS PERFORMED BY 1A391 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=16)
E187	Participate in staff meetings, other than conducting	87
G367	Sign out classified material	87
J606	Zeroize cryptographic equipment	87
F243	Review FCIFs or mission crew information files (MCIFs)	87
A16	Establish organizational policies, such as operating instructions (OIs) or	0,
Alo	standard operating procedures (SOPs)	81
C78	Evaluate communications operations	81
C104	Participate in upgrade or modifications of communications systems	
0101	equipment	81
B68	Supervise airborne communications systems personnel (AFSC 116X0)	81
H483	Transmit and receive messages using secure communications equipment	81
F222	Inventory COMSEC material	81
G351	Perform preflight inspections of secure voice systems	81
0789	Load codes in KY-58 cryptographic systems	18
A17	Establish performance standards for subordinates	75
A23	Plan communications support for special missions	7 5
A 4	Compile data for reports	75
G288	Operationally check aircraft UHF transmitters	75
F240	Review communications or general information files	75
H410	Operate airborne communications transceivers	75
H496	Transmit voice communications traffic through HF equipment	75
E169	Maintain COMSEC materials	75
G301	Operationally check UHF transceivers	75
B 38	Counsel personnel	75
H459	Request time-of-landing weather forecasts	7 5
E155	Document destruction of classified materials or documents	7 5
G322	Perform preflight inspections of communications consoles	7 5
J604	Turn in classified materials or documents	75
S939	Provide physical security for classified material	75
O793	Operationally check KY-58 cryptographic systems	75
N765	Operationally check UHF radio systems	75
G333	Perform preflight inspections of flight interphone systems	75

TABLE 16

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 1A371 AND DAFSC 1A391 PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS		1A371 (N=113)	1A391 (N=16)	DIFFERENCE
E164 H463 T952 G289 N787 H377 K622 H415 F234 G365	Log incoming or outgoing messages Send Have Quick TODs Firc weapons for proficiency Operationally check aircraft ultra high frequency (UHF) receivers Verify VHF/FM radio system configurations Coordinate air-to-ground message traffic with appropriate agencies Identify malfunctions within Have Quick systems Operate Have Quick systems in antijam mode Prepare communications kits Set Have-Quick system word-of-day (WOD) codes	40 32 48 73 47 52 27 27 39 38	6 0 19 44 19 0 0 13 13	34 32 29 29 27 27 26 26 25
C104 C75 A16 C103 A33 G254 C97 N771 A6	Participate in upgrade or modification of communications systems equipment Determine causes of mission operational discrepancies Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs) Participate in Transient Electromagnetic Pulse Standards (TEMPEST) certification Schedule personnel for schools, temporary duty (TDY) assignments, or nontechnical training Configure communication switching systems (CSSs) Indorse enlisted performance reports (EPRs) Remove or replace UHF radio systems Determine or establish logistical requirements, such as personnel, equipment, space, tools, or supplies Evaluate data for modification of equipment	33 22 22 43 13 18 18 12 20	81 81 83 83 84 84 85 85 85 85 85 85 85 86 86 87 86 86 86 86 86 86 86 86 86 86 86 86 86	44 41 33 32 32 32 30 30

The tasks they perform, listed in Table 17, show a distinct supervisory nature and involve functions such as planning briefings, preparing reports, and determining work priorities. Table 18 shows that DAFSC 1A300 personnel differ from their junior counterparts in the increased supervisory nature of their jobs.

AFMAN 36-2108 Specialty Descriptions Analysis

Survey data were compared to the AFMAN 36-2108 Specialty Descriptions for Airborne Communications Systems Personnel, dated 30 April 1991. The descriptions for the 3-, 5-, 7-, 9-, and 0-skill level were accurate, depicting the highly technical aspects of the jobs, as well as the general increase in supervisory responsibilities previously described in the DAFSC analysis. The descriptions also capture the primary responsibilities of AFSC 1A3X1 members in the applicable jobs identified in the job structure analysis process.

Training Analysis

Occupational surveys provide information which can be useful in the development and revision of relevant training programs. Factors used to evaluate entry-level AFSC 1A3X1 training include jobs being performed by first-enlistment personnel across career ladder jobs, percent first-job (1-24 months' TAFMS) and first-enlistment (1-48 months' TAFMS) members performing specific tasks, ratings of how much training emphasis tasks should receive in formal training, and relative TD ratings.

First-Enlistment Personnel Analysis

In this study, there are 65 AFSC 1A3X1 members in their first enlistment (1-48 months' TAFMS), representing 20 percent of all surveyed AFSC 1A3X1 personnel. The majority of these are members of the WABRES and AWACS Communications Operator jobs (see Figure 2). A large number of first-enlistment personnel did not group with any of the identified job members. These members are generally inexperienced and perform basic, technical tasks. Due to the diverse nature of the career field, members must complete specific mission-oriented OJT programs. A large number of the not grouped respondents are learning specific duties and will eventually group within jobs such as the WABRES Voice and Data Operator job and the AWACS Communications Operator job.

REPRESENTATIVE TASKS PERFORMED BY 1A300 PERSONNEL

TASKS		MEMBERS PERFORMING (N=5)
E187	Participate in staff meetings, other than conducting	100
A27	Plan or prepare briefings	100
A 4	Compile data for reports	100
A8	Determine work priorities	100
A5	Coordinate obtaining orders, passports, or visas with appropriate agencies	100
A17	Establish performance standards for subordinates	100
A33	Schedule personnel for schools, temporary duty (TDY) assignment, or nontechnical training	80
C110	Write staff studies, surveys, or special reports, other than training reports	80
B52	Implement personnel recognition programs	80
B36	Conduct staff meetings or briefings	80
A15	Draft budget requirements	80
C80	Evaluate individuals for promotion, demotion, reclassification, or special awards	80
B60	Interpret policies, directives, or procedures for subordinates	80
C104	Participate in upgrade or modifications of communications systems	00
C104	equipment	80
C78	Evaluate communications operations	80
A16	Establish organizational policies, such as operating instructions (OIs) or	
	standard operating procedures (SOPs)	80
E150	Annotate cabinet, safe, or room security forms	80
F241	Review communications requirements from OPS plans	80
B38	Counsel personnel	80
B69	Supervise military personnel with AFSCs other than 116X0 or 118X1	60
D121	Conduct training conferences or briefings	60
E197	Review publications, correspondence, or reports	60
Al	Assign personnel to duty positions	60
B68	Supervise airborne communications systems personnel (AFSC 116X0)	60
A24	Plan equipment replacement programs	60
D124	Determine training requirements, such as OJT or resident course training	
	requirements	60
C79	Evaluate data for modification of equipment	60
C108	Write EPRs	60
A6	Determine or establish logistical requirements, such as personnel,	•
	equipment, space, tools, or supplies	60
Al4	Develop work methods or procedures	60

TABLE 18

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 1A391 AND DAFSC 1A300 PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS		1A391 (N=16)	1A300 (N=5)	DIFFERENCE
F237 B57 Q826 D113 F245 A28 G351 O789 N752 1556	Request COMSEC material Implement work methods Operationally check lighting systems Assign instructors Review publications boards Plan or schedule work assignments or priorities Perform preflight inspections of secure voice systems Load codes in KY-58 cryptographic systems Adjust HF radio systems Perform engine shutdown procedures	27 20 44 44 63 88 38 38	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
A5 A15 H389 A8 B52 C90 E154 C99 D124	Coordinate obtaining orders, passports, or visas with appropriate agencies Draft budget requirements Implement interference countermeasures Determine work priorities Implement personnel recognition programs Evaluate suggestions Develop worksheets or logs Inspect condition and appearance of facilities Determine training requirements, such as OJT or resident course training requirements Analyze technical reports	31 13 13 56 38 19 19 19	00 00 00 00 00 00 00 00 00 00 00 00 00	6 6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

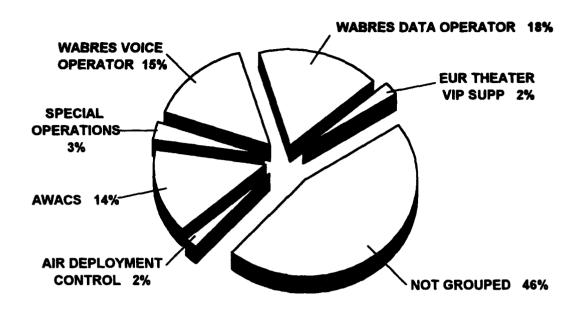


Figure 2

Table 19 shows first-enlistment personnel spend approximately 89 percent of their time performing technical duties such as preflight and routine on station communications operations. Table 20 displays representative tasks performed by first-enlistment AFSC 1A3X1 personnel. The technical nature of their jobs is shown through commonly performed tasks such as zeroizing cryptographic equipment, operating communications receivers and transceivers, and operating and checking UHF transmitters.

Table 21 lists emergency equipment used by members in their first enlistment, while Table 22 depicts communications and avionics equipment often used by this criterion group. Examples of each include NOMEX gloves, first-aid kits, and portable oxygen units; and operator interphones, HF communications equipment, and circuit breaker panels.

TE and TD Data

TE and TD data are secondary task factors that can help training development personnel decide which tasks to emphasize for entry-level training. These ratings, based on the judgments of senior career ladder NCOs at operational units, provide a rank-ordering of those tasks considered important for first-enlistment airmen training (TE) and a measure of the relative difficulty of those tasks (TD). When combined with data on the percentages of first-enlistment personnel performing 'asks, comparisons can be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors (TE and TD), accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more

RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES BY FIRST-ENLISTMENT AFSC 1A3X1 PERSONNEL

DUTIES		TIME SPENT (N=65)
Α	ORGANIZING AND PLANNING	2
В	DIRECTING AND IMPLEMENTING	ī
Č	INSPECTING AND EVALUATING	*
Ď	TRAINING	*
Ē	PERFORMING ADMINISTRATIVE AND SUPPLY ACTIVITIES	8
F	PERFORMING PREMISSION TASKS	8
G	PERFORMING PREFLIGHT AND ENROUTE OUTBOUND TASKS	15
Н	PERFORMING ON STATION ACTIVITIES	18
I	PERFORMING THRUFLIGHT INSPECTIONS	3
J	PERFORMING ENROUTE INBOUND, BEFORE LEAVING AIRCRAFT,	
	AND POSTMISSION ACTIVITIES	9
K	PERFORMING GENERAL AIRBORNE MAINTENANCE ACTIVITIES	3
L	PERFORMING AIR FORCE SATELLITE COMMUNICATIONS	
	(AFSATCOM)	5
M	MAINTAINING COMMUNICATION DISTRIBUTION	
	SYSTEM/INTERPHONE SYSTEMS	*
N	MAINTAINING HIGH FREQUENCY (HF), VERY HIGH FREQUENCY	
	(VHF) AND ULTRA HIGH FREQUENCY (UHF) SYSTEMS	5
0	MAINTAINING SECURE VOICE SYSTEMS	2
P	MAINTAINING DIGITAL INFORMATION LINKS	2
Q	PERFORMING TACTICAL BATTLE MANAGEMENT SYSTEMS (TBMS)	
	AND AN/USC-48 CAPSULE MAINTENANCE	*
R	MAINTAINING MISCELLANEOUS COMMUNICATIONS	2
S	PERFORMING CREW DUTIES	6
T	PERFORMING MOBILITY ACTIVITIES	I
U	PERFORMING ALERT DUTY ACTIVITIES	6

^{*} Denotes less than 1 percent

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT AFSC 1A3X1 PERSONNEL

TASKS	3	MEMBERS PERFORMING (N=65)
J606	Zeroize cryptographic equipment	76
F222	Inventory COMSEC material	75
H409	Operate airborne communications receivers	67
H411	Operate airborne communications transmitters	66
G288	Operationally check aircraft UHF transmitters	60
H483	Transmit and receive messages using secure communications equipment	60
F243	Review FCIFs or mission crew information files (MCIFs)	58
J599	Power down UHF equipment	58
H410	Operate airborne communications transceivers	58
E169	Maintain COMSEC materials	56
J604	Turn in classified materials or documents	56
G367	Sign out classified material	56
G351	Perform preflight inspections of secure voice systems	55
G322	Perform preflight inspections of communications consoles	55
J542	Destroy classified materials or documents	53
U979	Perform alert aircraft changeovers	53
E163	Inventory lists of classified materials or documents	53
G370	Tune frequencies manually	53
G289	Operationally check aircraft ultra high frequency (UHF) receivers	53
U982	Practice alert force exercises	52
O 790	Load codes in KY-75 cryptographic systems	52
F221	Inventory communications kits	50
E176	Maintain mission narrative logs	50
E165	Maintain aircrew currency requirements	50
H400	Maintain radio operations logs	50
H477	Transmit and receive messages using current call sign lists	50
J596	Power down HF equipment	49
E168	Maintain communication kits	49
J547	Perform before landing procedures	49
H391	Initiate or process phone patches	49

EMERGENCY EQUIPMENT USED BY MORE THAN 50 PERCENT OF AFSC 1A3X1 FIRST-ENLISTMENT PERSONNEL

EQUIPMENT	PERCENT MEMBERS RESPONDING
NOMEX Gloves	94
First Aid Kits	86
Portable Oxygen Units	86
Crash Axes	85
Fire Extinguishers	83
Life Rafts	83
Escape Slides	80
Escape Ropes	77
Life Preserver Units (LPUs)	77
Crew Knifes	62
Smoke Masks	60
Emergency Radios	57

COMMUNICATION AND AVIONICS EQUIPMENT USED BY MORE THAN 40 PERCENT OF AFSC 1A3X1 FIRST-ENLISTMENT PERSONNEL

EQUIPMENT	PERCENT MEMBERS RESPONDING
Operator Interphones	82
High Frequency (HF) Comm Equipment	75
Circuit Breaker Panels	69
Ultra High Frequency Comm Equipment	63
Wideband Encryption Devices	54
Frequency Modulation (FM) Radios	51
Communications Security Control Panels	49
Voice Cryptographic Units	46
UHF Nationwide Radio Systems	45
Staff Interphones	43
Public Address Systems	43
Emergency Action Message Alarm Controls	42
UHF SATCOM Equipment	42

appropriately planned for OJT programs. Low task factor ratings may highlight tasks best omitted from training for first-enlistment personnel. These decisions must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

As explained in the introduction, no TE data are reported in this survey due to insufficient rater agreement. The Airborne Communication Systems career field is extremely diverse and mission oriented, and, consequently, training needs are highly dependent upon specific mission needs.

Table 23 lists the tasks with the highest TD ratings. The majority of these tasks deal with supervisory and common maintenance functions. Advanced skill-level personnel are more likely to perform supervisory tasks. Since communications operators do not perform a great deal of maintenance activities, it is not surprising that the majority of these tasks are performed by low percentages of first-job, first-enlistment, 5-, and 7-skill level members.

Various lists of tasks, accompanied by TD ratings, are contained in the TRAINING EXTRACT package and should by reviewed in detail by technical school personnel. For a more detailed explanation of TD ratings, see <u>Task Factor Administration</u> in the SURVEY METHODOLOGY section of this report.

Training Documents

Information needed to evaluate the Specialty Training Standard (STS) and entry-level Plan of Instruction (POI) was provided by training personnel at the 335 Technical Training Squadron at Keesler AFB. They matched tasks on the JI to appropriate sections of the STS and ABR1A331 POI. Listings of the STS and POI were then produced, showing each STS paragraph and POI learning bjective, tasks that were matched, percent criterion group members performing, and TD ratings. These listings are included in the Training Extract sent to the school for review. Criteria set forth in AETCR 52-1 and AETCR 52-22, paragraph 3, were used to review the relevance of each STS paragraph and POI learning objective matched with tasks in the job inventory.

Any STS paragraph with matched tasks performed by 20 percent or more of first-job (1-24 months' TAFMS), first-enlistment (1-48 months' TAFMS), 5-, or 7-skill level members is considered to be supported and should be retained in the STS. Likewise, any learning objective with tasks matched performed by fewer than 20 percent of first-job or first-enlistment personnel is considered to be unsupported by survey data and subject to review by training personnel.

AFSC 1A3X1 STS

The match was conducted on the draft AFSC 1A3X1 STS. This proposed STS, drafted by technical school personnel and career field functional managers, was designed to combine Communications Operators (AFSC 1A3X1) and Maintenance Technicians (AFSC 1A5X2)

TABLE 23

SAMPLE TASKS WITH HIGHEST TASK DIFFICULTY RATINGS

PERCENT MEMBERS

				PERFORMING	MING	
		•	AFSC	AFSC		
			1A3X1	1A3X1		
		TSK	IST	IST		
TASKS	S	DIFF	JOB	ENL	1A351	1A371
A15	Draft budget requirements	8.45	0	т	\$	01
D125	Develop career development courses (CDCs)	8.27	0	7	_	ю
C91	Evaluate system designs	8.18	0	7	_	13
D127	Develop new equipment training programs	7.74	0	\$	6	23
K684	Troubleshoot flight director systems	7.71	0	7	-	01
A24	Plan equipment replacement programs	1.67	0	7	٣	14
K661	Remove or replace equipment cooling systems	1.67	0	7	_	4
D129	Develop resident courses	7.64	0	7	_	ю
D126	Develop IQT syllabus or related training material	7.62	0	٣	∞	61
K679	Troubleshoot autopilot systems	7.57	0	7	_	.
C104	Participate in upgrade or modifications of communications systems equipment	7.55	0	=	15	33
C102	Investigate accidents or incidents	7.54	0	٣	-	∞
B42	Direct implementation of emergency procedures to support contingency plans	7.52	0	6	~	15
A10	Develop cost-reduction programs	7.47	0	٣	4	9
C29	Evaluate data for modification reports	7.47	0	٣	4	20
K686	Troubleshoot GYRO systems	7.36	0	7		7
H489	Transmit information using IMC	7.34	0	3	4	13
A 16	Establish organizational policies, such as operating instructions (OIs) or standard	6	•	•	(;
	operating procedures (SOPs)	7.29	0	ω,	5	43

TD MEAN = 5.00 S.D. = 1.00

TABLE 23 (CONTINUED)

SAMPLE TASKS WITH HIGHEST TASK DIFFICULTY RATINGS

			2.	EKCENI MEMBEKS	TEMBEKS	
		,		PERFOR	MING	
		l	AFSC	AFSC		
			1A3X1	1A3X1		
			IST	IST		
TASKS	S	DIFF	JOB	ENL 1A351	1A351	1A371
			l			
9L)	Evaluate budget requirements	7.27	0	7	_	7
H436	Perform standardization and evaluation checks	7.26	0	7	7	26
A21	Maintain communications security (CO	7.25	20	15	81	40
K695	Troubleshoot navigation systems	7.17	0	m	7	01
K685		7.15	0	7	_	7
R890	Troubleshoot JTIDS	7.14	0	33	٣	ю
T964	Practice demolition techniques	7.13	0	0	_	-

TD MEAN = 5.00 S.D. = 1.00

functions in order to prepare the training community for the impending merger. Consequently, the document contains numerous elements pertaining to maintenance functions. For this reason, many of the items are not supported by AFSC 1A3X1 criterion group data. Table 24 displays a small sample of unsupported elements. All five of these areas involve maintenance activities, some of which are as detailed as repairing components to the line replaceable unit (LRU) level.

Due to the diverse nature of the career field, many areas of the STS are written in a general manner. The Π , on the other hand, was written to specifically cover every detailed aspect of the career field. For this reason, over 400 tasks were not referenced to the STS. Samples of these tasks that satisfy the STS support criterion are in Table 25. The majority of tasks concentrate on performing AFSATCOM functions. Training personnel should review these and other tasks not referenced, listed in the training extract, to determine if they merit inclusion in future STS documents.

AFSC 1A3X1 POI

The POI, unlike the STS, was written specifically for Communications Operator (AFSC 1A3X1) personnel. Consequently, only two objectives, listed in Table 26, were not supported by survey data. The first objective relates to teletype servicing procedures and its matched task exhibits a below average TD rating, while the other unmatched objective relating to meaconing, intrusion, jamining, and interference (MIJI) reports is matched with a task considered slightly more difficult to perform than the average task.

Numerous tasks were not referenced to the POI, largely because the POI was not written to include maintenance functions. Table 27 lists tasks supported by criterion members not referenced to the POI. The majority of these tasks deal with general airborne maintenance activities, suggesting that Communications Operators perform some maintenance functions. Training personnel should review these and other unmatched tasks, listed in the training extract, to determine their impact on future POI development.

Job Satisfaction Analysis

As stated in the <u>Specialty Job Satisfaction Analysis</u> section of this report, an examination of job satisfaction indicators can be very useful for career ladder managers as they attempt to determine possible factors affecting job performance of career ladder airmen. In addition to the previously discussed job satisfaction results for identified jobs, job satisfaction data can be expanded to provide indications of general attitudes within specific DAFSC groups.

With this in mind, job satisfaction responses for AFSC 1A3X1 members were analyzed and provide the following comparisons: (1) among TAFMS groups of the AFSC 1A3X1 career ladder and a comparative sample of other aircrew specialists surveyed in 1993 and (2) between current and previous AFSC 1A3X1 TAFMS groups.

TABLE 24

EXAMPLES OF AFSC 1A3X1 STS ELEMENTS NOT SUPPORTED BY SURVEY DATA (AFSC 1A3X1)

		PE	RCENT PERFOI	PERCENT MEMBERS PERFORMING	RS	
;		IST	IST	5.	7-	TASK
STS ELEI	STS ELEMENTS/TASKS	JOB	ENL	LVL	LVL	
10a(2).	Replace multi-pin connectors					
	K665 Remove or replace multi-pin connectors	0	S	-	S	6.13
10c(5).	VHF Systems - Replace LRUs					
	N775 Remove or replace VHF/FM system LRUs N774 Remove or replace VHF/AM system LRUs	00	9 9	2 3	T &	5.27 5.04
10e(1)(e).	Audio Distribution Systems- Replace LRUs					
	M745 Remove or replace interphone system LRUs	0	3		5	5.19
10f(4).	Emergency Recorder/Locator System - Isolate Malfunctions					
	R889 Troubleshoot emergency locator recorder systems	0	2	-	2	6.37
10g(5).	Have Quick Systems - Replace LRUs					
	K663 Remove or replace Have Quick system LRUs	0	2	2	0	5.23

TD MEAN = 5.00 S.D. = 1.00

TABLE 25

EXAMPLES OF TECHNICAL TASKS NOT REFERENCED TO THE STS

ı	TASK DIF	6.45	5.80	5.62	5.56	5.39		5.28	5.28	5.27	5.27	5.27	5.26	5.20	5.18	5.15	5.12	4.99	4.97	4.96	4.92	4.91	4.77
RS	7- LVL	35	47	14	14	12		14	46	12	12	11	16	17	28	59	51	17	31	17	20	38	75
MEMBE	5- LVL	25	39	23	26	22		21	37	21	19	18	25	21	20	49	37	27	35	21	24	37	99
PERCENT MEMBERS PERFORMING	IST	4	38	23	56	28		22	25	70	22	70	25	23	37	34	28	56	25	22	28	56	09
PE	1ST JOB	\$0	50	0	0	0		0	0	0	0	0	0	0	20	20	20	0	0	0	0	0	0
	TASKS	K615 Identify faulty system components				H390 Initiate contingency alternate routing procedures	H481 Transmit and receive messages using low frequency (LF) or very low frequency (VLF)	equipment	L713 Coordinate mission information with flight crews	L723 Initiate bypass mode of operation	L714 Edit AFSATCOM messages		L735 Transmit AFSATCOM messages	.716 Establish AFSATCOM links with ground stations	H381 Encode messages manually	H380 Decode messages manually	N784 Verify SATCOM systems configurations	L736 Update traffic with net control stations	L717 Establish communication links with on-station aircraft or primary control centers	1532 Perform thruflight inspections of teletype communications systems	L718 Establish wideband nets	H448 Reconfigure narrowband secure voice (NBSV)	H483 Transmit and receive messages using secure communications equipment

TD MEAN = 5.00 S.D. = 1.00

TABLE 26

EXAMPLES OF POI E3ABR1A331 ELEMENTS NOT SUPPORTED BY SURVEY DATA

		PERCENT MEMBERS PERFORMING	MEMBERS MING	
		IST	IST	TASK
POLOR	POI OBIECTIVE/TASKS	JOB	ENL	DIF
5				
II 2a.	Identify airborne teletype servicing procedures			
	H388 Identify missent or misrouted messages	0	11	4.73
III Sa.	Prepare MIJI reports			
	E191 Prepare MIJI reports	0	9	5.04

TD MEAN = 5.00 S.D. = 1.00

TABLE 27

EXAMPLES OF TECHNICAL TASKS NOT REFERENCED TO POI E3ABR1A331

PERCENT MEMBERS PERFORMING	T TSI	JOB ENL DIF	50 15 7.25	50 18 6.48	50 14 6.45	50 5 6.17	50 25 6.02	50 12 5.93	50 22 5.93	50 6 5.87	50 8 5.82	50 38	50 11 5.77	50 6 5.61	50 9 5.56	0 31 5.53	0 32 5.53	. 50 11	50 32 5.51
	ç	C	Maintain communications security accounts	Troubleshoot SATCOM systems	Identify faulty system components	Evaluate equipment performance tests	Identify malfunctions within secure voice systems	Perform special mission requirements	Troubleshoot KY-58 cryptographic systems	Isolate malfunctions within interphone systems		Prepare normal or emergency destruction plans of COMSEC material	Troubleshoot interphone systems	Remove or replace coaxial connectors	Remove or replace UHF radio systems	Maintain AFSATCOM wideband nets	Coordinate communications requirements with appropriate agencies	Coordinate flight information with White House communication center	Conduct testing of aircraft communications equipment
	I V	CACAL	A21	K699	K615	K614	K629	S923	0801	M739	K623	S938	K689	K660	N771	L728	F203	F210	K612

TD MEAN = 5.00 S.D. = 1.00

Table 28 shows the comparison of TAFMS group data of AFSC 1A3X1 personnel to a comparative sample of other aircrew AFSCs surveyed the previous calendar year. These data give a relative measure of how AFSC 1A3X1 personnel job satisfaction responses compare with similar Air Force specialties. Overall, job satisfaction for all three TAFMS groups is positive, although somewhat lower than most of the comparative sample's ratings. First-enlistment personnel related particularly lower ratings in every area, except perceived use of training. They feel that their talents are not as well utilized and that they do not gain as great a sense of accomplishment from their jobs as their counterparts. Previous analyses showed that entry-level personnel perform more alert duties than senior personnel, which may account for some of their dissatisfaction.

An indication of changes in job satisfaction perceptions within the career ladder is provided in Table 29, which presents TAFMS group data for current survey respondents and data from respondents to the last AFSC 1A3X1 OSR published in 1988 (then AFSC 116X0). Job satisfaction perceptions appear to have dropped in several areas since the last survey. First-enlistment personnel do not find their jobs as interesting and feel they are not being utilized effectively. They also show much less desire to reenlist than their predecessors. Personnel in their second enlistment are generally satisfied with their jobs; however, they don't feel their talents are utilized as properly, and they are also less likely to reenlist. Personnel in the 97+ TAFMS sample appear to be just as satisfied as personnel in the previous survey sample.

AFSC 1A5X2

Analysis of DAFSC Groups

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis examines differences in tasks performed between skill levels. This information may then be used to evaluate how well career ladder documents, such as AFMAN 36-2108 Specialty Descriptions, reflect what career ladder personnel are actually doing in the field.

The distribution of AFSC 1A5X2 skill-level groups across career ladder clusters and jobs is displayed in Table 30. As can be seen, personnel across skill levels primarily perform the Communications Technician job. All 11 of the 3-skill level members grouped into this job, and only 1 member of the 5-skill level community remained ungrouped. All but three of the 7-skill level personnel grouped in this job.

Table 31 offers another perspective by displaying relative time spent on duties across skill level groups. These data point to the fact this AFSC also experiences atypical career ladder progression. Members across all skill levels spend the majority of their time performing routine technical duties. At the 7-skill level, personnel begin to perform only slightly more supervisory duties, but their main thrust is still overwhelmingly technical in nature.

TABLE 28

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 1A3X1 TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE (Percent Members Responding)

	1-48 MOS TAFMS	TAFMS	49-96 MOS TAFMS	TAFMS	97+ MOS TAFMS	TAFMS
	CURRENT	SAMPLE	CURRENT	SAMPLE	CURRENT	SAMPLE
	(N=65)	(N=233)	(N=66)	(N=214)	(N=187)	(N=565)
EXPRESSED JOB INTEREST:					!	
Interesting	74	85	82	91	84	87
So-So	12	6	6	9	11	œ
Dull	14	9	∞	m	S	'n
PERCEIVED USE OF TALENTS						
Fairly Well to Excellent	<i>L</i> 9	85	78	8	87	89
Little or Not at All	33	15	22	10	13	=======================================
PERCEIVED USE OF TRAINING:						
Fairly Well to Excellent	93	94	92	46	91	68
Little or Not at All	7	9	9 0	9	6	=

Comparative data are from Aircrew AFSCs 1T2X1, 1A4X1, 1A5X3, and 1A0X1 surveyed in 1993.

TABLE 28 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 1A3X1 TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE (Percent Members Responding)

	1-48 MOS TAFMS	TAFMS	49-96 MOS TAFMS	S TAFMS	97+ MOS TAFMS	TAFMS
	CURRENT	SAMPLE	CURRENT	SAMPLE	CURRENT	SAMPLE
	(N=65)	(N=233)	(99=N)	(N=214)	(N=187)	(N=565)
SENSE OF ACCOMPLISHMENT:						
Satisfied	54	84	89	98	78	8
Neutral	15	S	11	4	7	7
Dissatisfied	31	11	20	10	14	12
REENLISTMENT INTENTIONS:						
Plan to Reenlist	63	70	80	82	76	75
Plan Not to Reenlist	37	30	81	8 1	4	7
Plan to Retire	0	0	0	0	61	8 2

Comparative data are from Aircrew AFSCs 1T2X1, 1A4X1, 1A5X3, and 1A0X1 surveyed in 1993.

TABLE 29

COMPARISON OF AFSC 1A3X1 JOB SATISFACTION INDICATORS FOR CURRENT AND PREVIOUS SURVEY (Percent Members Responding)

	1-48 MOS TAFMS	TAFMS	49-96 MOS TAFMS	TAFMS	97+ MOS TAFMS	TAFMS
	CURRENT	1987	CURRENT	1987	CURRENT	1987
	STUDY	STUDY	STUDY	STUDY	STUDY	STUDY
	(N=65)	(N=101)	(N=66)	(N=158)	(N=187)	(N=270)
EXPRESSED JOB INTEREST:						
	74	16	8	\$	84	98
So-So	12	, 9	5 6	=======================================	=	10
Dull	14	2	œ	m	\$	\$
PERCEIVED USE OF TALENTS:						
Fairly Well to Excellent	67	85	78	8	87	98
Little or Not at All	33	15	22	6	13	14
PERCEIVED USE OF TRAINING:						
Fairly Well to Excellent	93	94	92	06	91	&
Little or Not at All	7	\$	∞	6	6	1
REENLISTMENT INTENTIONS						
Plan to Reenlist	63	78	80	06	76	82
Plan Not to Reenlist	37	19	18	œ	4	4
Plan to Retire	0	0	0	0	61	Ξ

TABLE 30

DISTRIBUTION OF DAFSC 1A5X2 GROUP MEMBERS ACROSS CAREER LADDER JOBS (Percent)

CAREER	CAREER LADDER JOBS	1A532 (N=11)	1A552 (N=18)	1A572 (N=22)
 i	VIP Support Comm Operator	0	0	0
ij	European Theater VIP Support Comm Operator	0	0	0
III.	Special Air Missions Comm Operator	0	0	0
I	WABRES Voice Comm Operator	0	0	0
>	WABRES Data Comm Operator	0	0	0
VI.	Air Deployment Control Comm Operator	0	0	0
VII.	AWACS Comm Operator	0	0	0
VIII.	Special Operations Comm Operator	0	0	4
IX.	Comm Technician	100	94	8
×	Headquarters Staff	0	0	4
	Not Grouped	0	9	4

TABLE 31

TIME SPENT ON DUTIES BY MEMBERS OF AFSC 1A5X2 SKILL-LEVEL GROUPS (RELATIVE PERCENT OF JOB TIME)

20	DUTIES	1A532 (N=11)	1A552 (N=18)	1A572 (N=22)
<	ORGANIZING AND PLANNING	*	2	~ ∩
B	DIRECTING AND IMPLEMENTING	*	7	4
ပ	INSPECTING AND EVALUATING	*	7	4
Ω	TRAINING	0	4	κ.
ш	PERFORMING ADMINISTRATIVE AND SUPPLY ACTIVITIES	_	æ	ю
ī	PERFORMING PREMISSION TASKS	2	4	4
Ö	PERFORMING PREFLIGHT AND ENROUTE OUTBOUND TASKS	18	17	14
H	PERFORMING ON STATION ACTIVITIES	10	=	=
-	PERFORMING THRUFLIGHT INSPECTIONS	٣	7	-
_	PERFORMING ENROUTE INBOUND, BEFORE LEAVING AIRCRAFT, AND POSTMISSION			
	ACTIVITIES	11	6	9 0
¥	PERFORMING GENERAL AIRBORNE MAINTENANCE ACTIVITIES	14	12	Ξ
_	PERFORMING AIR FORCE SATELLITE COMMUNICATIONS (AFSATCOM)	*	*	*
Σ	MAINTAINING COMMUNICATION DISTRIBUTION SYSTEM/INTERPHONE SYSTEMS	က	7	7
z	MAINTAINING HIGH FREQUENCY (HF), VERY HIGH FREQUENCY (VHF), AND ULTRA	16	11	6
	HIGH FREQUENCY (UHF) SYSTEMS			
0	MAINTAINING SECURE VOICE SYSTEMS	4	٣	m
<u>d</u>	MAINTAINING DIGITAL INFORMATION LINKS	4	2	4
0	PERFORMING TACTICAL BATTLE MANAGEMENT SYSTEMS (TBMS) AND AN/USC-48	2	_	*
	CAPSULE MAINTENANCE			
~	MAINTAINING MISCELLANEOUS COMMUNICATIONS	9	\$	S
S	PERFORMING CREW DUTIES	m	m	4
<u></u>	PERFORMING MOBILITY ACTIVITIES	*	-	-
	PERFORMING ALERT DUTY ACTIVITIES	*	•	*

* Denotes less than 1 percent

Skill-Level Descriptions and Comparisons

<u>DAFSC 1A531</u>. Three-skill level personnel are all assigned to the Communications Technician job. They spend the majority of their time performing routine preflight and on station technical tasks exhibited in duties G and H (see Table 31). They also spend a considerable amount of time maintaining HF, VHF, and UHF systems, as well as performing general airborne maintenance activities. In total, they spend over 97 percent of their time performing technical functions. They average only 39 months' TAFMS and perform roughly 202 tasks on their jobs.

Examples of tasks DAFSC 1A532 airmen are likely to perform include verifying Have Quick system configurations, performing mission maintenance checks of intercoms, and verifying various system configurations. Other examples of common tasks performed by a majority of these airmen are shown in Table 32.

<u>DAFSC 1A552</u>. Five-skill level members also predominantly perform the Communications Technician job (see Table 30). Only one member, based on task performance, was not grouped. They also spend the majority of their time performing technical tasks; however, they perform slightly more supervisory functions than their junior counterparts. They average 84 months of service, more than twice that of the junior members, and have much broader jobs as they average 274 tasks, 72 more than 3-skill level personnel.

Examples of tasks these airmen are likely to perform are found in Table 33. Some of the functions they perform include operationally checking HF and SATCOM systems and performing JTIDS initialization procedures.

The tasks which best distinguish 5-skill level personnel from their junior counterparts are listed in Table 34. Since both skill-level personnel tend to perform many technical functions, the main difference between the groups appears to be the greater tendency of 5-skill level personnel to perform training duties and handle classified material.

<u>DAFSC 1A572</u>. All but three of the 7-skill level personnel perform the Communications Technician job. Based on task performance, one member was grouped in the Special Operations job, while another member was in the not grouped category. The final member of the DAFSC group performs duties in a Headquarters Staff job (see Table 30). Seven-skill level personnel spend 21 percent of their time performing supervisory duties, more than any other skill-level group. They still spend the vast majority of their time performing technical duties and therefore emphasize the atypical career ladder progression that exists within the AFSC. They average 175 months' TAFMS and perform an average of 286 tasks.

Examples of tasks 7-skill level airmen are likely to perform are listed in Table 35. These tasks are primarily technical and involve duties such as operationally checking transceivers and performing checkouts of HF and UHF equipment.

REPRESENTATIVE TASKS PERFORMED BY 1A532 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=11)
N782	Verify Have Quick system configurations	100
G307	Perform mission maintenance checks of intercom or galley chimes	100
N785	Verify UHF radio system configurations	100
N784	Verify SATCOM system configurations	100
N783	Verify HF radio system configurations	100
N777	Troubleshoot HF radio systems	100
N778	Troubleshoot UHF radio systems	100
N772	Remove or replace UHF system LRUs	100
N770	Remove or replace HF system LRUs	100
N779	Troubleshoot VHF radio systems	100
N774	Remove or replace VHF/AM system LRUs	100
N765	Operationally check UHF radio systems	100
N786	Verify VHF/AM radio system configurations	100
N763	Operationally check HF radio systems	100
O801	Troubleshoot KY-58 cryptographic systems	100
N764	Operationally check SATCOM systems	100
O802	Troubleshoot KY-75 cryptographic systems	100
N775	Remove or replace VHF/FM system LRUs	100
N787	Verify VHF/FM radio system configurations	100
N766	Operationally check VHF/AM radio systems	100
N767	Operationally check VHF/FM radio systems	100
G365	Set have-quick system times-of-day (TODs)	90
G366	Set have-quick system word-of-day (WOD) codes	90
J594	Power down ESS equipment	90
J597	Power down JTIDS equipment	90
R890	Troubleshoot JTIDS	90
H463	Send Have Quick TODs	90
K699	Troubleshoot SATCOM systems	90
J558	Perform JTIDS equipment checkouts	90
G327	Perform preflight inspections of emergency equipment	90

REPRESENTATIVE TASKS PERFORMED BY 1A552 PERSONNEL

TASKS	S	PERCENT MEMBERS PERFORMING (N=18)
G307	Perform mission maintenance checks of intercom or galley chimes	100
J598	Power down mission equipment	100
N764	Operationally check SATCOM systems	100
N763	Operationally check HF radio systems	100
G306	Perform joint tactical information data systems (JTIDS) initialization procedures	94
R872	Operationally check SATCOM systems	94
G301	Operationally check UHF transceivers	94
J597	Power down JTIDS equipment	94
G288	Operationally check aircraft UHF transmitters	94
N765	Operationally check UHF radio systems	94
G370	Tune frequencies manually	94
N784	Verify SATCOM system configurations	94
N757	Identify malfunctions within UHF radio systems	94
J553	Perform checkouts of UHF equipment	94
H466	Set codes on Mode II	94
N785	Verify UHF radio system configurations	94
J552	Perform checkouts of HF equipment	94
N756	Identify malfunctions within HF radio systems	94
N766	Operationally check VHF/AM radio systems	94
N786	Verify VHF/AM radio system configurations	94
N783	Verify HF radio system configurations	94
G292	Operationally check aircraft VHF transceivers	94
K624	Identify malfunctions within interphone systems	94
N758	Identify malfunctions within VHF/AM radio systems	94
G321	Perform preflight inspections of circuit breaker panels	88
G256	Configure programming display panels	88
G327	Perform preflight inspections of emergency equipment	88
G283	Operationally check aircraft HF transceivers	88
J599	Power down UHF equipment	88
F243	Paview FCIEs or mission crew information files (MCIEs)	99

TABLE 34

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 1A532 AND DAFSC 1A552 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS		1A532 (N=11)	1A552 (N=18)	DIFFERENCE
N775 H400 N773 J594 I535 O802 O801 N779 S947 G313	Remove or replace VHF/FM system LRUs Maintain radio operations logs Remove or replace VHF radio systems Power down ESS equipment Perform thruflight inspections of VHF radios Troubleshoot KY-75 cryptographic systems Troubleshoot VHF radio systems Troubleshoot VHF radio systems Transport test equipment or units to or from flightiness Perform preflight inspections of aircraft flight publications	100 36 91 73 100 100 27 64	67 61 61 72 72 73 8	33 30 30 28 28 27 25
A32 D135 D116 J598 F199 J542 H376 E155	Schedule personnel for leaves Evaluate progress of trainees Conduct in-flight maintenance (IFM) training Power down mission equipment Assemble professional or personal flight gear Destroy classified materials or documents Configure radios for tactical digital information link (TADIL-C) or Link-4 operations Participate in postmission debriefings, other than conducting Document destruction of classified materials or documents Perform preflight inspections of public address (PA) systems	0 0 45 18 18 36 0 0	56 56 100 72 72 89 89 67	56 56 55 54 55 50 54

REPRESENTATIVE TASKS PERFORMED BY 1A572 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=22)
G283	Operationally check aircraft HF transceivers	95
J553	Perform checkouts of UHF equipment	95
J552	Perform checkouts of HF equipment	95
H410	Operate airborne communications transceivers	95
G262	Inspect aircraft exterior for physical integrity	95
J541	Debrief ground maintenance personnel	95
R872	Operationally check SATCOM systems	95
G327	Perform preflight inspections of emergency equipment	95
G321	Perform preflight inspections of circuit breaker panels	95
0793	Operationally check KY-58 cryptographic systems	95
O789	Load codes in KY-58 cryptographic systems	95
H417	Operate JTIDS communications links	90
E165	Maintain aircrew currency requirements	90
J558	Perform JTIDS equipment checkouts	90
G301	Operationally check UHF transceivers	90
R869	Operationally check JTIDS	90
K630	Inspect avionics equipment, such as bonding straps, communications	
	cabinets, and connectors	90
R874	Operationally check TADIL A/ Link 11 systems	90
N763	Operationally check HF radio systems	90
N765	Operationally check UHF radio systems	90
J599	Power down UHF equipment	90
N757	Identify malfunctions within UHF radio systems	90
J547	Perform before landing procedures	90
P806	Identify malfunctions within TADIL A/Link 11 systems	90
N784	Verify SATCOM system configurations	90
P810	Operationally check TADIL A/Link 11 systems	90
P809	Operationally check KG-40 cryptographic systems	90
P808	Load codes in KG-40 cryptographic systems	90
O794	Operationally check KY-75 cryptographic systems	90
O790	Load codes in KY-75 cryptographic systems	90

The tasks which best differentiate 5- and 7-skill level airmen are listed in Table 36. Once again, the main distinction between these groups is the greater percentage of 7-skill level airmen performing supervisory tasks, such as establishing operating instructions (OIs) and determining logistical requirements.

AFMAN 36-2108 Specialty Descriptions Analysis

Survey data were compared to the AFMAN 36-2108 Specialty Descriptions for Airborne Command and Control personnel, dated 30 April 1991. The descriptions for the 3-, 5-, and 7-skill levels were accurate, depicting the highly technical aspects of the jobs, as well as the general increase in supervisory responsibilities previously described in the DAFSC analysis. The descriptions also capture the primary responsibilities of AFSC 1A5X2 members in the applicable jobs identified in the job structure analysis process.

Training Analysis

Occupational surveys provide information which can be useful in the development and revision of relevant training programs. Factors used to evaluate entry-level AFSC 1A5X2 training include jobs being performed by first-enlistment personnel across career ladder jobs, percent first-job (1-24 months' TAFMS) and first-enlistment (1-48 months' TAFMS) members performing specific tasks, ratings of how much training emphasis tasks should receive in formal training, and relative TD ratings.

First-Enlistment Personnel Analysis

In this study, there are 14 AFSC 1A5X2 members in their first enlistment (1-48 months' TAFMS), representing 27 percent of all surveyed AFSC 1A5X2 personnel. All of these grouped members perform work in the Communications Technician job (see Figure 3).

TABLE 36

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 1A552 AND DAFSC 1A572 PERSONNEL (PERCENT MEMBERS PERFORMING)

TASKS		1A552 (N=18)	1A572 (N=22)	DIFFERENCE
G225	Configure crewmember communications selectors (CCSs)	44	6	35
G254	Configure communication switching systems (CSSs)	6£ :	n ¦	34
1500	Perform thruflight inspections of AFTO Forms 781	61	27	34
N768	Remove or replace assemblies of HF auxiliary receivers	2 6	23	33
G312	Perform preflight inspections of aircraft emergency radios	44	14	30
F241	Review communications requirements from OPS plans	61	32	29
M747	Troubleshoot communication distribution systems	61	32	29
1526	Perform thruflight inspections of SATCOM systems	61	32	59
G291	Operationally check aircraft VHF omnidirectional receivers (VORs)	33	S	28
0860	Perform alert crew changeovers	20	23	27
A16	Establish organizational policies, such as operating instructions (OIs) or standard	7		
		22	89	46
A 6	Determine or establish logistical requirements, such as personnel, equipment, space,			
	tools, or supplies	17	59	-42
A27	Plan or prepare briefings	44	98	-42
A 3	Classify information into categories, such as TOP SECRET, SECRET, or			
	CONFIDENTIAL	-	20	-39
E197	Review publications, correspondence, or reports	17	55	-38
E187	Participate in staff meetings, other than conducting	44	82	-38
G355	Perform preflight inspections of static dischargers	9	41	-35
C104	Participate in upgrade or modifications of communications systems equipment	17	50	-33
8939	Provide physical security for classified material	44	11	-33
A14	Develop work methods or procedures	22	55	-33

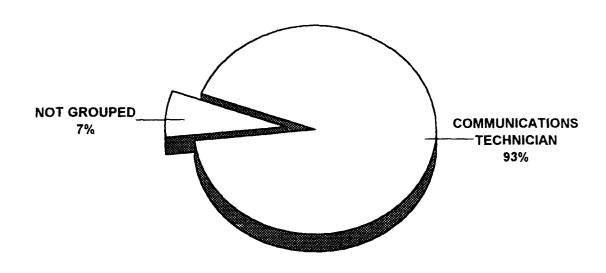


Figure 3

Table 37 shows first-enlistment personnel spend virtually all of their time on technical duties, such as performing preflight tasks and maintaining HF, VHF, and UHF communications equipment. Table 38 displays representative tasks performed by first-enlistment AFSC 1A5X2 personnel. The technical nature of their jobs is shown through commonly performed tasks such as powering down UHF and JTIDS equipment and verifying SATCOM system configurations. Table 39 shows that they are likely to use emergency equipment, such as NOMEX gloves, crash axes, and escape slides, while Table 40 depicts communications and avionics equipment, such as operator interphones and circuit breaker panels, often used by first-enlistment personnel.

TD Data

TD is a secondary task factor that can help training development personnel decide which tasks to emphasize for entry-level training. These ratings, based on the judgments of senior career ladder NCOs at operational units, and a measure of the relative difficulty of those tasks (TD). When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on TD, accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-enlistment personnel. These decisions must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES BY FIRST-ENLISTMENT AFSC 1A5X2 PERSONNEL

DU	TIES	PERCENT TIME SPENT
A	ORGANIZING AND PLANNING	*
В	DIRECTING AND IMPLEMENTING	*
C	INSPECTING AND EVALUATING	*
Ď	TRAINING	*
E	PERFORMING ADMINISTRATIVE AND SUPPLY ACTIVITIES	*
F	PERFORMING PREMISSION TASKS	2
G	PERFORMING PREFLIGHT AND ENROUTE OUTBOUND TASKS	18
Н	PERFORMING ON STATION ACTIVITIES	11
I	PERFORMING THRUFLIGHT INSPECTIONS	3
J	PERFORMING ENROUTE INBOUND, BEFORE LEAVING AIRCRAFT,	
	AND POSTMISSION ACTIVITIES	10
K	PERFORMING GENERAL AIRBORNE MAINTENANCE ACTIVITIES	13
L	PERFORMING AIR FORCE SATELLITE COMMUNICATIONS	
	(AFSATCOM)	*
M	MAINTAINING COMMUNICATION DISTRIBUTION	
	SYSTEM/INTERPHONE SYSTEMS	2
N	MAINTAINING HIGH FREQUENCY (HF), VERY HIGH FREQUENCY	
	(VHF) AND ULTRA HIGH FREQUENCY (UHF) SYSTEMS	17
0	MAINTAINING SECURE VOICE SYSTEMS	4
P	MAINTAINING DIGITAL INFORMATION LINKS	6
Q	PERFORMING TACTICAL BATTLE MANAGEMENT SYSTEMS (TBMS)	
	AND AN/USC-48 CAPSULE MAINTENANCE	*
R	MAINTAINING MISCELLANEOUS COMMUNICATIONS	5
S	PERFORMING CREW DUTIES	3
T	PERFORMING MOBILITY ACTIVITIES	*
U	PERFORMING ALERT DUTY ACTIVITIES	*

^{*} Denotes less than 1 percent

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT AFSC 1A5X2 PERSONNEL

TASKS	S	MEMBERS PERFORMING (N=14)
J599	Power down UHF equipment	100
J597	Power down JTIDS equipment	100
G307	Perform mission maintenance checks of intercom or galley chimes	100
N784	Verify SATCOM system configurations	100
N765	Operationally check UHF radio systems	100
J600	Power down VHF equipment	100
J596	Power down HF equipment	100
N764	Operationally check SATCOM systems	100
N763	Operationally check HF radio systems	100
N766	Operationally check VHF/AM radio systems	100
N786	Verify VHF/AM radio system configurations	100
P805	Identify malfunctions within KG-40 cryptographic systems	100
K699	Troubleshoot SATCOM systems	92
N762	Operationally check ESSs	92
G301	Operationally check UHF transceivers	92
N782	Verify Have Quick system configurations	92
G288	Operationally check aircraft UHF transmitters	92
N785	Verify UHF radio system configurations	92
N783	Verify HF radio system configurations	92
N778	Troubleshoot UHF radio systems	92
G292	Operationally check aircraft VHF transceivers	92
J553	Perform checkouts of UHF equipment	92
J552	Perform checkouts of HF equipment	92
N772	Remove or replace UHF system LRUs	92
N777	Troubleshoot HF radio systems	92
J554	Perform checkouts of VHF equipment	92
N770	Remove or replace HF system LRUs	92
O801	Troubleshoot KY-58 cryptographic systems	92
N774	Remove or replace VHF/AM system LRUs	92
N767	Operationally check VHF/FM radio systems	92

EMERGENCY EQUIPMENT USED BY MORE THAN 50 PERCENT OF AFSC 1A5X2 FIRST-ENLISTMENT PERSONNEL

Crash Axes Escape Slides Fire Extinguishers Life Preserver Units (LPUs) Life Rafts Portable Emergency Light Assemblies Smoke Masks First Aid Kits Inertia Reels Escape Ropes	IENT	PERCENT MEMBERS RESPONDING
Crash Axes Escape Slides Fire Extinguishers Life Preserver Units (LPUs) Life Rafts Portable Emergency Light Assemblies Smoke Masks First Aid Kits Inertia Reels Escape Ropes	Gloves	100
Fire Extinguishers Life Preserver Units (LPUs) Life Rafts Portable Emergency Light Assemblies Smoke Masks First Aid Kits Inertia Reels Escape Ropes		100
Fire Extinguishers Life Preserver Units (LPUs) Life Rafts Portable Emergency Light Assemblies Smoke Masks First Aid Kits Inertia Reels Escape Ropes	lides	100
Life Rafts Portable Emergency Light Assemblies Smoke Masks First Aid Kits Inertia Reels Escape Ropes		100
Portable Emergency Light Assemblies Smoke Masks First Aid Kits Inertia Reels Escape Ropes	erver Units (LPUs)	100
Smoke Masks First Aid Kits Inertia Reels Escape Ropes	s	100
First Aid Kits Inertia Reels Escape Ropes	Emergency Light Assemblies	100
Inertia Reels Escape Ropes	lasks	100
Escape Ropes	Kits	86
• •	œls	7 9
Emergency Radios	opes	71
	cy Radios	64

COMMUNICATION AND AVIONICS EQUIPMENT USED BY MORE THAN 40 PERCENT OF AFSC 1A5X2 FIRST-ENLISTMENT PERSONNEL

EQUIPMENT	PERCENT MEMBERS RESPONDING
Operator Interphones	82
High Frequency (HF) Comm Equipment	75
Circuit Breaker Panels	69
UHF Comm Equipment	63
Wideband Encryption Devices	54
Frequency Modulation (FM) Radios	51
Communications Security Control Panels	49
Voice Cryptographic Units	46
UHF Nationwide Radio Systems	45
Staff Interphones	43
Public Address Systems	43
Emergency Action Message Alarm Controls	42
UHF SATCOM Equipment	42

As explained in the introduction, no TE data are reported in this survey due to insufficient rater agreement. The Airborne Communication Systems career field is extremely diverse and mission oriented, and, consequently, training needs are highly dependent upon specific mission needs.

Table 41 lists tasks with the highest TD ratings. The majority of these tasks deal with supervisory and maintenance functions. The majority of maintenance tasks relate to aircraft systems, such as flight director systems and autopilot systems, rather than specific communications systems. Therefore, it is not surprising that the majority of tasks are performed by low percentages of first-job, first-enlistment, 5-, and 7-skill level members.

Various lists of tasks, accompanied by TD ratings, are contained in the TRAINING EXTRACT package and should by reviewed in detail by technical school personnel. For a more detailed explanation of TD ratings, see <u>Task Factor Administration</u> in the SURVEY METHODOLOGY section of this report.

Training Documents

Information needed to evaluate the STS and entry-level POI documents was provided by training personnel at the 332 Technical Training Squadron at Keesler AFB and the 552 Training Squadron at Tinker AFB. They matched tasks on the JI to appropriate sections of the STS and the AQR118331 and E3000BQOTX POIs, respectively. Listings of the STS and POIs were then produced, showing each STS paragraph and POI learning objective, tasks that were matched, percent criterion group members performing, and TD ratings. These listings are included in the Training Extract sent to the school for review. Criteria set forth in ATCR 52-1 and ATCR 52-22, paragraph 3, were used to review the relevance of each STS paragraph and POI learning objective matched with JI tasks.

Any STS paragraph with matched tasks performed by 20 percent or more of first-job (1-24 months' TAFMS), first-enlistment (1-48 months' TAFMS), 5-, or 7-skill level members is considered to be supported and should be retained in the STS. Likewise, any learning objective with tasks matched performed by fewer than 20 percent of these criterion personnel is considered to be unsupported by survey data and subject to review by training personnel.

AFSC 1A5X2 STS: The match was conducted on the draft AFSC 1A3X1 STS. This proposed STS, drafted by technical school personnel and career field functional managers, was designed to combine Communications Operators (AFSC 1A3X1) and Maintenance Technicians (AFSC 1A5X2) functions in order to prepare the training community for the impending merger. Consequently, the document contains numerous elements pertaining to communications operator functions. For this reason, many of the items are not supported by AFSC 1A5X2 criterion group data. Table 42 displays a small sample of unsupported elements. All of these elements involve maintenance activities, two of which pertain specifically to teletype systems. While it is not

TABLE 41

EXAMPLE TASKS WITH HIGHEST TRAINING DIFFICULTY RATINGS

			PI	ERCENT MEMBI PERFORMING	PERCENT MEMBERS PERFORMING	S.
			AFSC 1A5X2	AFSC 1A5X2		
		TSK	IST	IST	AFSC	AFSC
TASKS	8	DIFF	JOB	ENL	1A552	1A572
A 15	Dang budgat sammant		,			•
215		8.45	0	0		14
D125	Develop career development courses (CDCs)	8.27	0	0	9	6
C91	Evaluate system designs	8.18	0	0	9	23
D127	Develop new equipment training programs	7.74	0	0	17	41
K684	Troubleshoot flight director systems	7.71	0	0	0	0
A24	Plan equipment replacement programs	1.67	0	0	9	8
K661	Remove or replace equipment cooling systems	1.67	0	7	0	14
D129	Develop resident courses	7.64	0	0	9	\$
D126	Develop IQT syllabus' or related training material	7.62	0	0	28	32
K679	Troubleshoot autopilot systems	7.57	0	0	0	0
C104	Participate in upgrade or modifications of communications systems equipment	7.55	0	7	17	50
C102	Investigate accidents or incidents	7.54	0	0	9	~
B42	Direct implementation of emergency procedures to support contingency plans	7.52	0	0	9	81
A10	Develop cost-reduction programs	7.47	0	0	9	14
C79	Evaluate data for modification reports	7.47	0	7	22	41
K686	Troubleshoot GYRO systems	7.36	0	0	0	0
H489	Transmit information using IMC	7.34	0	0	0	0
A16	Establish organizational policies, such as operating instructions (OIs) or standard					
,	operating procedures (SOPs)	7.29	0	0	22	89
C76	Evaluate budget requirements	7.27	0	0	11	6

TD MEAN = 5.00 S.D. = 1.00

TABLE 41 (CONTINUED)

SAMPLE TASKS WITH HIGHEST TRAINING DIFFICULTY RATINGS

			PERCENI	PERCENT MEMBERS PERFORMING	
		AFSC 1A5X2	AFSC 1A5X2		
	TSK	IST	1ST	AFSC	AFSC
TASKS	DIFF	JOB	ENL	1A552	1A572
H436 Perform standardization and evaluation checks	7.26	0	7	11	32
A21 Maintain communications security (COMSEC) accounts	7.25	0	14	11	23
K695 Troubleshoot navigation systems	7.17	0	0	0	0
•	7.15	0	0	0	0
R890 Troubleshoot JTIDS	7.14	100	86	29	11
T964 Practice demolition techniques	7.13	0	0	0	0

TD MEAN = 5.00 S.D. = 1.00

TABLE 42

EXAMPLES OF AFSC 1A3X1 STS ELEMENTS NOT SUPPORTED BY SURVEY DATA (AFSC 1A5X2)

		PERCENT MEMBERS PERFORMING	MEMBER	S PERFO	RMING	
		IST	IST	ت ک	7-	TASK
STS ELEM	STS ELEMENT/TASKS	JOB	ENL	LVL	LVL	DIF
10s(1)(d).	Teletype - Isolate malfunctions					
	K703 Troubleshoot teletype communications systems	0	0	=	14	6.48
		6 5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7				
10s(1)(e).	l eletype - Keplace LKUs					
	K644 Remove or replace assemblies of computerized teletype	0	0	9	6	5.52
	communications systems R885 Remove or replace teletype communications systems	0	0	-	5	5.12
8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9						
10s(3)(c).	Audio/Vídeo Recorders - Replace LRUs					
	K640 Remove or replace assemblies of aircraft recording systems	0	0	0	6	6.02
10y(2)(e).	Radio Navigational Systems - Replace LRUs					
	K653 Remove or replace assemblies of navigation systems	0	0	0	8	5.95

surprising that many communications operator tasks are not supported, it is concerning that so many maintenance-oriented tasks are not supported. It is therefore recommended that training personnel review all unsupported STS elements to determine if training revisions are necessary.

Due to the diverse nature of the career field, many areas of the STS are written in a general manner. The JI, on the other hand, was written to specifically cover every detailed aspect of the career field. For this reason, over 400 tasks were not referenced to the STS. Samples of these tasks that satisfy the STS support criterion are in Table 43. These tasks cover a variety of maintenance functions and should be reviewed by training personnel to determine if they merit inclusion in future STS documents.

AFSC 1A3X1 POIs: The POIs, unlike the STS, were written specifically for AFSC 1A5X2 personnel. Consequently, only four POI 3000BQOTX objectives, listed in Table 44, were not supported by survey data. Two of the four objectives involve removing and installing and performing checkouts of the flight recorder locator system (FLRS). The removing and installing function is considered more difficult to perform than the average task. The other two objectives pertain to performing station handover procedures and participating in M-sortie air refueling procedures. Both of these areas are considered nearly average in difficulty.

Numerous tasks were not referenced to POI 3000BQOTX. Table 45 lists tasks supported by criterion members not referenced to the POI. The majority of these tasks deal with airborne maintenance activities rather than communications operator duties. Training personnel should review these and other unmatched tasks, listed in the training extract, to determine their impact on future POI development.

Every matched POI ERAQR11831 objective was supported by survey data, suggesting that it is an extremely sound training document. It is very general in nature, however, and therefore did not lend itself well to match with many specific JI tasks. Samples of tasks not referenced to this POI are in Table 46. These tasks cover a variety of maintenance functions; however, tasks pertaining to ESS and JTIDS systems dominate the list. Once again, training personnel should study the list of tasks not referenced, located in the training extract, to ensure that no important training areas are neglected.

Job Satisfaction Analysis

As stated in the <u>Specialty Job Satisfaction Analysis</u> section of this report, an examination of job satisfaction indicators can be very useful for career ladder managers as they attempt to determine possible factors affecting job performance of career ladder airmen. In addition to the previously discussed job satisfaction results for identified jobs, job satisfaction data can be expanded to provide indications of general attitudes within specific DAFSC groups.

TABLE 43

EXAMPLES OF TECHNICAL TASKS NOT REFERENCED TO THE STS (AFSC 1A5X2)

	TASK	DIF	
80		LVL	
PERCENT MEMBERS PERFORMING	5-	LVL	
RCENT MEMBI	IST	ENL	
PE	IST	JOB ENL	

		IST	IST	۶.	7-	TASK
TASKS		JOB	ENT	LVL	LVL	DIF
K614	Evaluate equipment perfonnance tests	20	21	99	20	6.17
6 2	Inspect communications stations	40	21	17	6	5.91
S938	Prepare normal or emergency destruction plans of COMSEC material	20	21	11	32	5.80
H447	Reconfigure ESS equipment	40	64	<i>L</i> 9	59	5.76
T960	Perform decontamination producers for chemical warfare agents	20	21	39	32	5.63
K612	Conduct testing of aircraft communications equipment	09	79	68	83	5.51
K670	Remove or replace TADIL-C or Link-4 systems	09	27	2 6	45	5.46
M737	Adjust communication distribution systems	20	56	39	32	5.29
L713	Coordinate mission information with flight crews	40	21	99	41	5.28
N781	Verify ESS configurations	80	98	72	89	5.26
N782	Verify Have Quick system configurations	100	93	78	73	5.24
R884	Remove or replace TADIL A/Link 11 systems	40	20	99	45	5.23
0800	Troubleshoot ancillary fill devices	40	21	17	23	5.21
N784	Verify SATCOM system configurations	100	100	94	16	5.12
N760	Operationally check ADF system LRUs	40	20	99	36	5.10
G254	Configure communication switching systems (CSSs)	40	43	36	S	5.04
L717	Establish communication links with on-station aircraft or primary control centers	20	21	36	36	4.97
H448	Reconfigure narrowband secure voice (NBSV) cryptographic systems	40	64	83	11	4.91
K608	Adjust SATCOM systems	20	64	72	89	4.78
H483	Transmit and receive messages using secure communications equipment	70	43	20	59	4.77

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TABLE 44

EXAMPLES OF POI E3000BQOTX ELEMENTS NOT SUPPORTED BY SURVEY DATA

		PERCENT MEMBERS PERFORMING	MBERS ING	
POI O	POI OBJECTIVE/TASKS	IST JOB	IST ENL	TASK
ESe.	Master station handover			
	H438 Perform transfer communications systems procedures	0	7	5.19
E.	Using CT checklist, perform M-sortie air refueling procedures - inbound			
	H433 Perform in-flight air refueling procedures	20	14	4.49
J14b.	Remove and install FRLS components			
	K640 Remove or replace assemblies of aircraft recording systems	0	0	6.02
J14c.	Perform FRLS checkout			
	R866 Operationally check emergency locator recorder systems	0	0	4.84

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TABLE 45

EXAMPLES OF TECHNICAL TASKS NOT REFERENCED TO POI E000BQOTX

		PERCENT MEMBERS PERFORMING	IEMBERS MING	
1		TSI	IST	TASK
TASKS		JOB	ENL	DIF.
K672	Research cabling diagrams	09	90	6.94
K635	Modify or reconfigure aircraft communications	20	36	89.9
K671	Research block diagrams	09	71	6.55
C75	Determine causes of mission operational discrepancies	40	21	6.42
A22	Plan communications support for mission exercises	40	36	6.33
H413	Operate ESS equipment	09	71	6.24
G306	Perform joint tactical information data systems	100	98	6.15
R877	Remove or install SATCOM systems	40	43	6.05
M747	Troubleshoot communication distribution systems	40	57	6.01
62	Inspect communications stations	40	21	5.91
M739	Isolate malfunctions within interphone systems	09	36	5.87
922N	Troubleshoot HF auxiliary receivers	09	57	5.85
K689	Troubleshoot interphone systems	40	57	5.77
177N	Remove or replace UHF radio systems	100	98	5.56
K624	Identify malfunctions within interphone systems	40	57	5.49
N762	Operationally check ESSs	80	93	5.49
K670	Remove or replace TADIL-C or Link-4 systems	09	57	5.46
M744	Remove or replace communication distribution	09	57	5.43
H418	Operate transceiver relay equipment	09	36	5.33
N768	Remove or replace assemblies of HF auxiliary receivers	80	64	5.30

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TABLE 46

EXAMPLES OF TECHNICAL TASKS NOT REFERENCED TO POI ERAQR11831

PERCENT MEMBERS

		PERFORMING	MING	
	•	IST	IST	TASK
TASKS		JOB	ENL	DIF
R890	Troubleshoot JTIDS	100	98	7.14
K672	Research cabling diagrams	09	20	6.94
K682	Troubleshoot ESSs	80	79	29'9
K621	Identify malfunctions within ESSs	09	79	6:39
K671	Research block diagrams	09	71	6.55
K687	Troubleshoot Have Quick systems	80	98	6.51
K628	Identify malfunctions within SATCOM systems	09	71	6.48
K699	Troubleshoot SATCOM systems	80	93	6.48
R888	Troubleshoot electrical power distribution systems	20	7	6.41
K622	Identify malfunctions within Have Quick systems	09	79	6:36
H417	Operate JTIDS communication links	80	79	6.33
H413	Operate ESS equipment	09	71	6.24
G306	Perform joint tactical information data systems (JTIDS) initialization procedures	100	98	6.15
R877	Remove or install SATCOM systems	40	43	6.05
K620	Identify malfunctions within equipment cooling systems	40	64	6.04
0801	Troubleshoot KY-58 cryptographic systems	100	93	5.93
0807	Troubleshoot KY-75 cryptographic systems	001	93	5.89
R880	Remove or replace JTIDS LRUs receivers	100	98	5.76

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With this in mind, job satisfaction responses for AFSC 1A5X2 members were analyzed and provide the following comparisons: (1) among TAFMS groups of the AFSC 1A5X2 career ladder and a comparative sample of other aircrew specialists surveyed in 1993, and (2) between current and previous AFSC 1A5X2 TAFMS groups.

Table 47 shows the comparison of TAFMS group data of AFSC 1A5X2 personnel to a comparative sample of other aircrew AFSCs surveyed the previous calendar year. These data give a relative measure of how AFSC 1A5X2 personnel job satisfaction responses compare with similar Air Force specialties. Overall, job satisfaction for all three TAFMS groups is positive, although somewhat lower than most of the comparative sample's ratings. First-enlistment personnel don't feel their jobs are as interesting as their counterparts. They feel their talents are not being as well utilized; however, they are more satisfied with their training. Personnel in their second enlistment are also much more dissatisfied with their utilization and are less likely to reenlist than their counterparts. Senior personnel are consistently less satisfied than their counterparts; however, they are more likely to reenlist.

An indication of changes in job satisfaction perceptions within the career ladder is provided in Table 48, which presents TAFMS group data for current survey respondents and data from respondents to the last OSR of the AFSC 1A5X2 career ladder in 1988 (then AFSC 118X1). Job satisfaction perceptions appear to have dropped in many areas since the last survey. First-enlistment personnel do not find their jobs as interesting and are currently less likely to enlist. Personnel in their second enlistment find their jobs only slightly less interesting, but are also much less likely to stay in the Service. Senior personnel are less satisfied in every area, but still more likely to reenlist.

TABLE 47

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 1A5X2 TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE (Percent Members Responding)

	1-48 MOS TAFMS	TAFMS	49-96 MOS TAFMS	S TAFMS	97+ MOS TAFMS	TAFMS
	CURRENT (N=14)	SAMPLE (N=233)	CURRENT (N=10)	SAMPLE (N=214)	CURRENT (N=27)	SAMPLE (N=565)
EXPRESSED JOB INTEREST:						
Interesting	7.1	85	80	91	74	87
So-So	29	6	10	9	15	∞
Dull	0	9	10	ю	=	2
PERCEIVED USE OF TALENTS:						
Fairly Well to Excellent	79	85	70	6	74	68
Little or Not at All	21	15	30	01	26	=
PERCEIVED USE OF TRAINING:						
Fairly Well to Excellent	100	94	06	94	8	68
Little or Not at All	0	9	10	9	61	11

Comparative data are from Aircrew AFSCs 1T2X1, 1A4X1, 1A5X3, and 1A0X1 surveyed in 1993

TABLE 47 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 1A5X2 TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE (Percent Members Responding)

	1-48 MOS TAFMS	S TAFMS	49-96 MO	49-96 MOS TAFMS	97+ MOS TAFMS	TAFMS
	CURRENT (N=14)	SAMPLE (N=233)	CURRENT (N=10)	SAMPLE (N=214)	CURRENT (N=27)	SAMPLE (N=565)
SENSE OF ACCOMPLISHMENT:					,	
Satisfied	79	84	80	98	70	81
Neutral	14	S	10	4	7	7
Dissatisfied	7	П	10	10	23	12
REENLISTMENT INTENTIONS:						
Plan to Reenlist	64	70	70	82	81	75
Plan Not to Reenlist	36	30	30	18	4	7
Plan to Retire	0	0	0	0	15	18

Comparative data are from Aircrew AFSCs 1T2X1, 1A4X1, 1A5X3, and 1A0X1 surveyed in 1993

TABLE 48

COMPARISON OF AFSC 1A5X2 JOB SATISFACTION INDICATORS FOR CURRENT AND PREVIOUS SURVEY (Percent Members Responding)

	1-48 MOS TAFMS	TAFMS	49-96 MOS TAFMS	TAFMS	97+ MOS TAFMS	TAFMS
	CURRENT STUDY (N=14)	1987 STUDY (N=101)	CURRENT STUDY (N=10)	1987 STUDY (N=158)	CURRENT STUDY (N=27)	1987 STUDY (N=270)
EXPRESSED JOB INTEREST:				(Garay)		
Interesting	71	91	80	85	74	98
So-So	29	9	10	11	15	10
Dull	0	2	10	9	=	4
PERCEIVED USE OF TALENTS:						
Fairly Well to Excellent	79	85	70	06	74	98
Little or Not at All	21	15	30	6	26	4
PERCEIVED USE OF TRAINING:						
Fairly Well to Excellent	100	94	06	06	81	80
Little or Not at All	0	ς.	10	6	61	=

TABLE 48 (CONTINUED)

COMPARISON OF AFSC 1A5X2 JOB SATISFACTION INDICATORS FOR CURRENT AND PREVIOUS SURVEY (Percent Members Responding)

	1-48 MOS	TAFMS	49-96 MOS	TAFMS	97+ MOS	TAFMS
	CURRENT	1987	CURRENT	1987	CURRENT	1987
	STUDY	STUDY	STUDY	STUDY	STUDY	STUDY
	(N=14) $(N=101)$	(N=101)	(N=10) $(N=158)$	(N=158)	(N=27) (N=270)	(N=270)
REENLISTMENT INTENTIONS:						
Plan to Reenlist	64	81	70	06	8	82
Plan Not to Reenlist	36	61	30	∞	4	4
Plan to Retire	0	0	0	0	15	11

Comparison of AFSC 1A3X1 to AFSC 1A5X2

SELECTED AFSC 1A3X1 SAMPLE MEMBERS		
Number of members	318	
Percent of total sample	86%	
Average number of tasks performed	181	
Average TAFMS	127 mos	
Predominant DAFSC	1A351	
Predominant paygrades	E-4/E-5	
ASVAB requirement	G-43	

SELECTED AFSC 1A5X2 SAMPLE MEMBERS	
Number of members	51
Percent of total	
sample	14%
Average number of	
tasks performed	264
Average TAFMS	114 mos
Predominant DAFSC	1A572
Predominant paygrades	E-4/E-5
ASVAB requirement	E-67

The merger of AFSCs 1A3X1 and 1A5X2 has been an issue for several years. Members in the field have expressed mixed reactions towards this matrimonial relationship. A comparison of each AFSC's survey results provides insight into their compatibility. The 318 AFSC 1A3X1 personnel comprised 86 percent of the survey sample, while the 51 AFSC 1A5X2 incumbents formed the other 14 percent. All but three of the AFSC 1A5X2 personnel distinctly grouped in the Communications Technician job, while the AFSC 1A3X1 members were divided amongst nine mission-oriented jobs. Although the AFSC 1A5X2 members grouped in a unique job, they perform many of the same tasks as their Communications Operator counterparts. compared to a sample of the Communications Operator respondents, similarity in performance amounted to a task overlap of 66 percent. The tasks which best differentiate the groups are listed in Table 49. This table shows the Communications Operators are more likely to handle COMSEC material and, as expected, perform operator duties such as maintaining radio operator logs. transmitting and receiving messages, and requesting weather forecasts. Communications Technicians, on the other hand, work more frequently with JTIDS equipment and perform maintenance duties, such as troubleshooting and removing and replacing faulty system components. Communications Technicians also perform a wider range of duties, as they perform an average of 264 tasks on their jobs, 83 more than Communication Operators. The AFSC 1A3X1 sample was comprised predominantly of 5-skill level airmen holding the E-4/E-5 paygrades, whereas the AFSC 1A5X2 sample was predominantly made up of 7-skill level airmen in paygrades E-4/E-5. AFSC 1A3X1 personnel were the more senior group in the sample with an average TAFMS of 127 months, slightly 1 more year of service time than their counterparts. Personnel in both AFSCs were predominantly assigned to ACC.

IMPLICATIONS

This survey was conducted to update the data base for the AFSC 1A3X1 and 1A5X2 career ladders. The timing of the survey is excellent, as these specialties are currently preparing for a merger, which will be completed by 1 November 1995. Data compiled from this survey support the current structure of both career ladders. Specialty job analysis indicates 2 clear distinction between the AFSCs; however, many commonalities exist. Both career fields exhibit somewhat of an atypical career ladder progression, as senior level airmen continue to perform numerous technical tasks on their jobs. The AFMAN 36-2108 Specialty Descriptions accurately portray the work performed by members of both career ladders. Job satisfaction data, while generally positive, reveal that personnel from both career fields are not as satisfied with their jobs as members of a comparative sample of aircrew personnel. Furthermore, job satisfaction perceptions are on a downward swing, as members of this sample were not as satisfied as the 1988 sample personnel.

The final, and perhaps most important, implication involves the training evaluation section of this report. Survey data were matched to the proposed STS, which contains both Communications Operator and Maintenance Technician training elements. Many elements were unsupported by survey data, and numerous tasks remained unreferenced. It is suggested that training personnel examine the <u>Training Analysis</u> sections of this report and use the accompanied training extract to evaluate the STS and ensure it accurately represents the training needs of the career field.

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY MEMBERS OF CAREER LADDER JOBS

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VIP SUPPORT COMM OPERATOR

TASKS		PERCENT MEMBERS PERFORMING
H410	Operate airborne communications transceivers	100
F222	Inventory COMSEC material	100
G283	Operationally check aircraft HF transceivers	100
E155	Document destruction of classified materials or documents	100
G351	Perform preflight inspections of secure voice systems	100
G367	Sign out classified material	100
H459	Request time-of-landing weather forecasts	100
G348	Perform preflight inspections of SATCOM systems	100
G299	Operationally check secure communications equipment	100
J604	Turn in classified materials or documents	100
F237	Request COMSEC material	100
G321	Perform preflight inspections of circuit breaker panels	100
K628	Identify malfunctions within SATCOM systems	100
H482	Transmit and receive messages using SATCOM voice equipment	100
H483	Transmit and receive messages using secure communications	
	equipment	100
K629	Identify malfunctions within secure voice systems	100
O789	Load codes in KY-58 cryptographic systems	100
N765	Operationally check UHF radio systems	100
H493	Transmit position reports	100
H391	Initiate or process phone patches	91
H399	Maintain listening watches	91
A23	Plan communications support for special missions	91
J552	Perform checkouts of HF equipment	91
E165	Maintain aircrew currency requirements	91
N763	Operationally check HF radio systems	91
F224	Maintain personal aircrew flight manuals or checklists	91
S939	Provide physical security for classified material	91
G322	Perform preflight inspections of communications consoles	91
G349	Perform preflight inspections of secure data systems	91
F203	Coordinate communications requirements with appropriate agencies	91

TABLE A2
EUROPEAN THEATER VIP SUPPORT COMM OPERATOR

TASKS		PERCENT MEMBERS PERFORMING
H399	Maintain listening watches	100
E176	Maintain mission narrative logs	100
G351	Perform preflight inspections of secure voice systems	100
S907	Arrange for lodging or transportation for crewmembers	100
O 793	Operationally check KY-58 cryptographic systems	100
O789	Load codes in KY-58 cryptographic systems	100
G273	Load identification friend or foe (IFF) codes	100
G276	Load or unload baggage, cargo, or food	100
F206	Coordinate flight information with Mystic Star HF networks	100
G288	Operationally check aircraft UHF transmitters	100
J606	Zeroize cryptographic equipment	100
E156	Establish communications kits	100
S908	Assist in refueling of aircraft	100
B54	Implement safety or security programs	80
A23	Plan communications support for special missions	80
N764	Operationally check SATCOM systems	80
N763	Operationally check HF radio systems	80
N765	Operationally check UHF radio systems	80
A2I	Maintain communications security (COMSEC) accounts	80
G283	Operationally check aircraft HF transceivers	80
C78	Evaluate communications operations	80
S910	Coordinate communications configuration requirements with flight	00
	crews	80
K612	Conduct testing of aircraft communications equipment	80
H410	Operate airborne communications transceivers	80
S911	Coordinate communications traffic flow with distinguished visitors	80
F237	or contacts Persont COMSEC meterial	80
	Request COMSEC material	80
F234	Prepare communications kits	٥U
K611	Comply with safety guidelines, such as when working with high	80
Dill	voltage equipment or radio frequency radiation	80 80
D111	Administer ground training, such as communications security Maintain radio operations logs	80 80
H400	Maintain (2010 ODETALIORS 1098	δU

TABLE A3 SPECIAL AIR MISSIONS COMM OPERATOR

		PERCENT
		MEMBERS
TASK:		PERFORMING
F210	Coordinate flight information with White House communications	
1210	center	100
S939	Provide physical security for classified material	100
F206	Coordinate flight information with Mystic Star HF networks	100
G283	Operationally check aircraft HF transceivers	100
G298	Operationally check radio teletype equipment	100
H442	Prepare messages using White House format	100
S922	Perform ATC radio communication procedures	100
G349	Perform preflight inspections of secure data systems	100
G285	Operationally check aircraft radio compasses	100
G351	Perform preflight inspections of secure voice systems	100
G348	Perform preflight inspections of SATCOM systems	100
H410	Operate airborne communications transceivers	100
K648	Remove or replace assemblies of flight director systems	100
G288	Operationally check aircraft UHF transmitters	100
G284	Operationally check aircraft IFF systems	100
G318	Perform preflight inspections of altitude alerting systems	100
G319	Perform preflight inspections of autopilot systems	100
G 340	Perform preflight inspections of multiplexing equipment	100
G332	Perform preflight inspections of flight director systems	100
K683	Troubleshoot facsimile systems	100
G301	Operationally check UHF transceivers	100
G346	Perform preflight inspections of privatized voice systems	100
H409	Operate airborne communications receivers	100
K625	Identify malfunctions within multiplexing systems	100
O 793	Operationally check KY-58 cryptographic systems	100
G292	Operationally check aircraft VHF transceivers	100
G290	Operationally check aircraft very high frequency (VHF) receivers	100
K647	Remove or replace assemblies of facsimile systems	100
G291	Operationally check aircraft VHF omnidirectional receivers	
	(VORs)	100
K703	Troubleshoot teletype communications systems	100

WABRES VOICE COMM OPERATOR

TASKS		PERCENT MEMBERS PERFORMING
G351	Perform preflight inspections of secure voice systems	100
G283	Operationally check aircraft HF transceivers	97
O790	Load codes in KY-75 cryptographic systems	97
H373	Authenticate stations using challenge and reply systems	95
H400	Maintain radio operations logs	90
F222	Inventory COMSEC material	90
H407	Monitor scheduled voice broadcasts	90
0794	Operationally check KY-75 cryptographic systems	90
H410	Operate airborne communications transceivers	88
F221	Inventory communications kits	88
O789	Load codes in KY-58 cryptographic systems	88
N763	Operationally check HF radio systems	88
H409	Operate airborne communications receivers	86
H399	Maintain listening watches	86
H403	Make scheduled voice broadcasts	86
H397	Maintain frequency discipline of stations on net	86
J596	Power down HF equipment	86
U979	Perform alert aircraft changeovers	86
H381	Encode messages manually	86
H496	Transmit voice communications traffic through HF equipment	84
G288	Operationally check aircraft UHF transmitters	84
U982	Practice alert force exercises	84
U980	Perform alert crew changeovers	81
H380	Decode messages manually	81
H386	Identify incoming calls using call sign lists	79
G322	Perform preflight inspections of communications consoles	79
G367	Sign out classified material	7 9
J547	Perform before landing procedures	7 9
N756	Identify malfunctions within HF radio systems	79
H 411	Onerate airhorne communications transmitters	77

WABRES DATA COMM OPERATOR

TASKS		PERCENT MEMBERS PERFORMING
F222	Inventory COMSEC material	96
L735	Transmit AFSATCOM messages	96
L733	Prepare AFSATCOM messages for transmission	94
L728	Maintain AFSATCOM wideband operations	94
L730	Perform AFSATCOM operation equipment checks	94
L718	Establish wideband nets	94
H439	Prepare messages using automated digital information network	
	(AUTODIN) format	92
L706	Assume AFSATCOM net control	92
L715	Enter codes into command post synchronizers	92
U982	Practice alert force exercises	92
E164	Log incoming or outgoing messages	90
R862	Load codes in KG-84 cryptographic systems	90
L727	Maintain AFSATCOM narrowband operations	90
R870	Operationally check KG-84 cryptographic systems	90
L716	Establish AFSATCOM links with ground stations	90
L719	Identify AFSATCOM faults	90
U979	Perform alert aircraft changeovers	90
G349	Perform preflight inspections of secure data systems	88
U980	Perform alert crew changeovers	88
L726	Initiate satellite commands	88
L731	Perform net control operations	88
L709	Configure AFSATCOM systems for TDM Mode I operations	88
H390	Initiate contingency alternate routing procedures (CARPs)	86
H495	Transmit teletype communications traffic through UHF equipment	84
H494	Transmit teletype communications traffic through HF equipment	84
L723	Initiate bypass mode of operations	84
U983	Practice alert reaction procedures	84
L734	Reconfigure AFSATCOM systems for operations in degraded	
	conditions	84
L722	Initiate AFSATCOM line-of-sight operations	84
E169	Maintain COMSEC materials	82

TABLE A6 AIR DEPLOYMENT CONTROL COMM OPERATOR

TASKS		PERCENT MEMBERS PERFORMING
G283	Operationally check aircraft HF transceivers	100
G292	Operationally check aircraft VHF transceivers	100
J546	Participate in postmission debriefings, other than conducting	100
F231	Participate in premission briefings, other than conducting	100
S942	Review emergency communications procedures	100
J547	Perform before landing procedures	100
E169	Maintain COMSEC materials	100
H466	Set codes on Mode II	100
S940	Provide physical security for COMSEC	100
F237	Request COMSEC material	100
F222	Inventory COMSEC material	100
J600	Power down VHF equipment	100
J596	Power down HF equipment	100
J599	Power down UHF equipment	100
G367	Sign out classified material	100
J588	Perform postflight inspections of UHF radios	100
J589	Perform postflight inspections of VHF radios	100
O 790	Load codes in KY-75 cryptographic systems	100
H496	Transmit voice communications traffic through HF equipment	83
S939	Provide physical security for classified material	83
H459	Request time-of-landing weather forecasts	83
F224	Maintain personal aircrew flight manuals or checklists	83
G288	Operationally check aircraft UHF transmitters	83
H422	Patch landline traffic through HF equipment	83
G301	Operationally check UHF transceivers	83
G268	Inspect communications systems for physical integrity	83
G273	Load identification friend or foe (IFF) codes	83
S946	Stow crewmember gear on aircraft	83
H410	Operate airborne communications transceivers	83
1553	Perform checkouts of LIHE equipment	83

AWACS COMM OPERATOR

TASKS	3	PERCENT MEMBERS PERFORMING
J606	Zeroize cryptographic equipment	100
O789	Load codes in KY-58 cryptographic systems	98
O793	Operationally check KY-58 cryptographic systems	98
P806	Identify malfunctions within TADIL A/Link 11 systems	96
O 794	Operationally check KY-75 cryptographic systems	96
O790	Load codes in KY-75 cryptographic systems	96
G252	Close or secure crew entry doors	96
J596	Power down HF equipment	96
G322	Perform preflight inspections of communications consoles	96
P809	Operationally check KG-40 cryptographic systems	96
G307	Perform mission maintenance checks of intercom or galley chimes	96
P818	Verify TADIL A/Link 11 system configurations	94
P808	Load codes in KG-40 cryptographic systems	94
P810	Operationally check TADIL A/Link 11 systems	94
H376	Configure radios for tactical digital information link (TADIL-C) or	
	Link-4 operations	94
P819	Verify TADIL C/Link 4 system configurations	94
G367	Sign out classified material	92
G321	Perform preflight inspections of circuit breaker panels	92
F237	Request COMSEC material	92
H410	Operate airborne communications transceivers	90
G370	Tune frequencies manually	90
H451	Reconfigure wideband secure voice (WBSV) cryptographic systems	90
N785	Verify UHF radio system configurations	90
P805	Identify malfunctions within KG-40 cryptographic systems	90
H448	Reconfigure narrowband secure voice (NBSV) cryptographic	90
Eaga	systems	88
F222	Inventory COMSEC material	88
S935	Practice rapid decompression procedures	88
P807	Identify malfunctions within TADIL C/Link 4 systems Configure baseband distribution panels (BDPs)	86
G253 G299	Operationally check secure communications equipment	86
ひとソソ	Operationally check secure communications equipment	OU

TABLE A7 SPECIAL OPERATIONS COMM OPERATOR

		PERCENT
		MEMBERS
TASK	<u> </u>	PERFORMING
		100
G351	Perform preflight inspections of secure voice systems	100
0789	Load codes in KY-58 cryptographic systems	100
G283	Operationally check aircraft HF transceivers	98
H400	Maintain radio operations logs	98
G292	Operationally check aircraft VHF transceivers	98
G321	Perform preflight inspections of circuit breaker panels	98
F222	Inventory COMSEC material	96
0793	Operationally check KY-58 cryptographic systems	96
S939	Provide physical security for classified material	96
O790	Load codes in KY-75 cryptographic systems	96
H485	Transmit and receive messages using VHF equipment	96
N765	Operationally check UHF radio systems	96
H468	Set codes on Mode IV	96
H380	Decode messages manually	96
H410	Operate airborne communications transceivers	94
G301	Operationally check UHF transceivers	94
G367	Sign out classified material	94
G288	Operationally check aircraft UHF transmitters	94
0794	Operationally check KY-75 cryptographic systems	94
S940	Provide physical security for COMSEC	94
H459	Request time-of-landing weather forecasts	94
J604	Turn in classified materials or documents	94
S941	Review aircraft flight or maintenance records, such as AFTO Forms	
	781-series forms	94
N763	Operationally check HF radio systems	94
J596	Power down HF equipment	94
N766	Operationally check VHF/AM radio systems	94
H381	Encode messages manually	94
F243	Review FCIFs or mission crew information files (MCIFs)	92
J606	Zeroize cryptographic equipment	92
G305	Perform initial setup of Have Quick systems	92

COMM TECHNICIAN

TASKS		PERCENT MEMBERS <u>PERFORMING</u>
J553	Perform checkouts of UHF equipment	98
J552	Perform checkouts of HF equipment	98
N785	Verify UHF radio system configurations	98
N783	Verify HF radio system configurations	98
N763	Operationally check HF radio systems	98
N784	Verify SATCOM system configurations	98
N764	Operationally check SATCOM systems	98
G301	Operationally check UHF transceivers	96
G288	Operationally check aircraft UHF transmitters	96
G283	Operationally check aircraft HF transceivers	96
N757	Identify malfunctions within UHF radio systems	96
N756	Identify malfunctions within HF radio systems	96
N765	Operationally check UHF radio systems	96
J558	Perform JTIDS equipment checkouts	94
G307	Perform mission maintenance checks of intercom or galley chimes	94
N772	Remove or replace UHF system LRUs	94
N786	Verify VHF/AM radio system configurations	94
G306	Perform joint tactical information data systems (JTIDS) initialization	
	procedures	92
H417	Operate JTIDS communications links	92
J597	Power down JTIDS equipment	92
J599	Power down UHF equipment	92
H410	Operate airborne communications transceivers	92
G327	Perform preflight inspections of emergency equipment	92
K628	Identify malfunctions within SATCOM systems	92
G321	Perform preflight inspections of circuit breaker panels	92
G292	Operationally check aircraft VHF transceivers	92
R872	Operationally check SATCOM systems	92
N758	Identify malfunctions within VHF/AM radio systems	92
N766	Operationally check VHF/AM radio systems	92
G268	Inspect communications systems for physical integrity	90

HEADQUARTERS STAFF

TASKS	3	PERCENT MEMBERS PERFORMING
A27	Plan or prepare briefings	100
A8	Determine work priorities	100
A4	Compile data for reports	85
E187	Participate in staff meetings, other than conducting	85
B 36	Conduct staff meetings or briefings	85
A17	Establish performance standards for subordinates	71
C104	Participate in upgrade or modifications of communications systems equipment	71
C110	Write staff studies, surveys, or special reports, other than training reports	71
A15	Draft budget requirements	71
E150	Annotate cabinet, safe, or room security forms	71
B35	Adjust daily schedules to meet operational commitments	71
E197	Review publications, correspondence, or reports	57
C78	Evaluate communications operations	57
B69	Supervise military personnel with AFSCs other than 116X0 or 118X1	57
A 6	Determine or establish logistical requirements, such as personnel,	31
AU	equipment, space, tools, or supplies	57
A5	Coordinate obtaining orders, passports, or visas with appropriate	31
A.	agencies	57
B 50	Draft recommended changes to communication publications	57
B37	Conduct supervisory orientations of newly assigned personnel	57
C76	Evaluate budget requirements	42
A33	Schedule personnel for schools, temporary duty (TDY) assignment,	
120	or nontechnical training	42
C79	Evaluate data for modification of equipment	42
A16	Establish organizational policies, such as operating instructions	
	(Ols) or standard operating procedures (SOPs)	42
A14	Develop work methods or procedures	42
B60	Interpret policies, directives, or procedures for subordinates	42
C71	Analyze technical reports	42
A28	Plan or schedule work assignments or priorities	42
B51	Implement cost-reduction programs	42
A24	Plan equipment replacement programs	42
B52	Implement personnel recognition programs	42

APPENDIX B

EXPANDED LIST OF TASK MODULE STATEMENTS

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These task modules (TMs) were developed to organize and summarize the extensive task information for the specialty. The TMs were derived by statistical clustering of the tasks in terms of which tasks are performed by the same incumbents. For example, if an individual performs one spectacle-ordering task, the probability is very high that the individual will perform other spectacle-ordering tasks. Thus, each of the modules can be viewed as a "natural group" of associated or related tasks (see TM 0002 below). The statistical clustering generally approximates these "natural groupings."

The title of each TM is our best estimate as to the general subject content of the group of tasks. The TMs are useful for organizing the task data into meaningful units and as a way to concisely summarize the extensive job data. However, TMs are only one way to organize the information. Other stategies may also be valid.

F222 G367 J604 H483 J542 J606 F221	Inventory COMSEC material Sign out classified material Turn in classified materials or documents Transmit and receive messages using secure communications equipment Destroy classified materials or documents Zeroize cryptographic equipment Inventory communications kits
J604 H483 J542 J606	Sign out classified material Turn in classified materials or documents Transmit and receive messages using secure communications equipment Destroy classified materials or documents Zeroize cryptographic equipment
H483 J542 J606	Turn in classified materials or documents Transmit and receive messages using secure communications equipment Destroy classified materials or documents Zeroize cryptographic equipment
J542 J606	Destroy classified materials or documents Zeroize cryptographic equipment
J606	Zeroize cryptographic equipment
F221	Inventory communications kits
0002	ST0891 OPERATING COMM EQUIPMENT
H410	Operate airborne communications transceivers
H411	Operate airborne communications transmitters
H409	Operate airborne communications receivers
0003	ST0798 OPS CHECK/PREFLIGHT COMM EQUIPMENT
G299	Operationally check secure communications equipment
G322	Perform preflight inspections of communications consoles
0004	ST0794 OPS CHECK HF/UHF EQUIPMENT
G283	Operationally check aircraft HF transceivers
N763	Operationally check HF radio systems
G288	Operationally check aircraft UHF transmitters
N765	Operationally check UHF radio systems
G301	Operationally check UHF transceivers
G289	Operationally check aircraft ultra high frequency (UHF) receivers

0005	ST0916 POWER DOWN HF/UHF EQUIPMENT
J596 J599	Power down HF equipment Power down UHF equipment
0006	ST0815 CRYPTOGRAPHIC SYSTEMS DUTIES
G351 O793 O789	Perform preflight inspections of secure voice systems Operationally check KY-58 cryptographic systems Load codes in KY-58 cryptographic systems
0007	ST0683 ROUTINE ON STATION DUTIES
H391 H399 H400 H496	Initiate or process phone patches Maintain listening watches Maintain radio operations logs Transmit voice communications traffic through HF equipment
0008	ST0705 HANDLING COMSEC
\$939 \$940 \$941 \$942 \$943	Provide physical security for classified material Provide physical security for COMSEC Review aircraft flight or maintenance records, such as AFTO Forms 781-series forms Review emergency communications procedures Review normal or emergency destruction plans of COMSEC material
0009	ST0635 PREFLIGHT/POSTFLIGHT DUTIES
G363 G333 J548 J547	Power up equipment in preparation for missions Perform preflight inspections of flight interphone systems Perform before leaving aircraft procedures Perform before landing procedures

0010	ST0600 PREMISSION DUTIES
E155	Document destruction of classified materials or documents
E165	Maintain aircrew currency requirements
E163	Inventory lists of classified materials or documents
F231	Participate in premission briefings, other than conducting
F199	Assemble professional or personal flight gear
0011	ST0778 MAINTAINING HF/UHF EQUIPMENT
N756	Identify malfunctions within HF radio systems
N783	Verify HF radio system configurations
N785	Verify UHF radio system configurations
N757	Identify malfunctions within UHF radio systems
0012	ST0492 MONITORING COMM EQUIPMENT
J598	Power down mission equipment
H405	Monitor displays or indicators for equipment status during operations
H404	Monitor communications links for malfunctions
H464	Set codes on cryptographic devices
0013	ST0489 INFORMATION COORDINATION
H459	Request time-of-landing weather forecasts
F237	Request COMSEC material
F203	Coordinate communications requirements with appropriate agencies
F213	Coordinate mission requirements with appropriate agencies
H458	Request and receive weather reports for use, other than transmissions
G252	Close or secure crew entry doors
0014	ST0470 DEBRIEFING ACTIVITIES
M742	Operationally check interphone systems
H412	Operate emergency equipment
J546	Participate in postmission debriefings, other than conducting
J545	Participate in operations debriefings

0015	ST0455 INSPECTING COMM EQUIPMENT
F240	Perieu communications or general information files
G268	Review communications or general information files Inspect communications systems for physical integrity
G264	Inspect aircraft life support equipment
G269	Inspect crew position lights
0207	
0016	ST0542 MAINTAINING SATCOM EQUIPMENT
G34 8	Perform preflight inspections of SATCOM systems
K628	Identify malfunctions within SATCOM systems
H482	Transmit and receive messages using SATCOM voice equipment
K629	Identify malfunctions within secure voice systems
N764	Operationally check SATCOM systems
N784	Verify SATCOM system configurations
R872	Operationally check SATCOM systems
K699	Troubleshoot SATCOM systems
K674	Set circuit breakers
K624	Identify malfunctions within interphone systems
0017	ST0663 OPERATIONALLY CHECKING VHF EQUIPMENT
J554	Perform checkouts of VHF equipment
H485	Transmit and receive messages using VHF equipment
G290	Operationally check aircraft very high frequency (VHF) receivers
G292	Operationally check aircraft VHF transceivers
N767	Operationally check VHF/FM radio systems
J600	Power down VHF equipment
N766	Operationally check VHF/AM radio systems
N787	Verify VHF/FM radio system configurations
G293	Operationally check aircraft VHF transmitters
N786	Verify VHF/AM radio system configurations
0020	ST0395 GENERAL AIRBORNE MAINTENANCE DUTIES
VCIO	
K612 K633	Conduct testing of aircraft communications equipment Maintain safe work areas
K633	Comply with safety guidelines, such as when working with high voltage equipment or radio
V011	frequency radiation
K631	Maintain crew position logs
K615	

0023	ST0474 MAINTAINING SUPPORT MATERIALS
E169	Maintain COMSEC materials
E176	Maintain mission narrative logs
E164	Log incoming or outgoing messages
F235	Prepare COMSEC kits
E172	Maintain flight crew information files (FCIFs)
E168	Maintain communication kits
F234	Prepare communications kits
E167	Maintain circuit logs
E174	Maintain logs of aircraft transmissions and receptions
E170	Maintain current call sign lists
0024	ST0436 GENERAL OPERATOR DUTIES
H373	Authenticate stations using challenge and reply systems
H386	Identify incoming calls using call sign lists
H487	Transmit and receive telephone calls using airborne switchboards
H377	Coordinate air-to-ground message traffic with appropriate agencies
H381	Encode messages manually
H477	Transmit and receive messages using current call sign lists
H380	Decode messages manually
0025	ST0534 MAINTAINING STATIONS ON NET
H397	Maintain frequency discipline of stations on net
H398	
H403	Make scheduled voice broadcasts
H407	Monitor scheduled voice broadcasts
0029	ST0454 COORDINATING INFLIGHT INFORMATION
H493	Transmit position reports
S913	Coordinate flight information with the flight crews
F216	Determine International Civil Aviation Organization (ICAO) HF radio stations or frequencies
H479	Transmit and receive messages using ICAO procedures
S922	Perform ATC radio communication procedures

G284 F212 H460 F220	Operationally check aircraft IFF systems Coordinate flight routes with navigators or pilots Request, receive and record aircraft clearances Identify Flight Information Regions (FIRs) to be traversed
0034	ST0595 INSPECTING AIRCRAFT SYSTEMS
J541 G263 G331 G262 F215	Debrief ground maintenance personnel Inspect aircraft interior for physical integrity Perform preflight inspections of fixed aircraft antennas Inspect aircraft exterior for physical integrity Determine aircraft status
0035	ST0594 OPERATING/MAINTAINING HAVE QUICK SYSTEMS
H415 H463 N758 H416 K627 N759 H401 H392 N782 G366 G365 K622 G305 R868 J607 K687	Operate Have Quick systems in antijam mode Send Have Quick TODs Identify malfunctions within VHF/AM radio systems Operate Have Quick systems in bypass modes Identify malfunctions within PA systems Identify malfunctions within VHF/FM radio systems Maintain UHF Have Quick system links Initiate UHF Have Quick system links Verify Have Quick system configurations Set have-quick system word-of-day (WOD) codes Set have-quick system times-of-day (TODs) Identify malfunctions within Have Quick systems Perform initial setup of Have Quick systems Operationally check Have Quick systems Zeroize Have Quick systems Troubleshoot Have Quick systems
0039	ST0501 MAINTAINING DIGITAL INFORMATION SYSTEMS
P806 P818 P808 P810 P809 G253 G307	Identify malfunctions within TADIL A/Link 11 systems Verify TADIL A/Link 11 system configurations Load codes in KG-40 cryptographic systems Operationally check TADIL A/Link 11 systems Operationally check KG-40 cryptographic systems Configure baseband distribution panels (BDPs) Perform mission maintenance checks of intercom or galley chimes
G256	Configure programming display panels

P805 H394 H428 H433 H376 P819 P811 P807	Operationally check TADIL A/ Link 11 systems Identify malfunctions within KG-40 cryptographic systems Interpret digital displaying indicator (DDI) displays Perform ADU or DDI switching actions Perform in-flight air refueling procedures Configure radios for tactical digital information link (TADIL-C) or Link-4 operations Verify TADIL C/Link 4 system configurations Operationally check TADIL C/Link 4 systems Identify malfunctions within TADIL C/Link 4 systems
H473	Transmit and receive information using TADIL C/Link 4
P816	Troubleshoot TADIL A/Link 11 systems
P815	Troubleshoot KG-40 cryptographic systems
P817	Troubleshoot TADIL C/Link 4 systems
P814	Reseat TADIL A/Link 11 system components
•=====	
0043	ST0822 OPERATING/MAINTAINING JTIDS EQUIPMENT
G306	Perform joint tactical information data systems (JTIDS) initialization procedures
H417	Operate JTIDS communications links
J558	Perform JTIDS equipment checkouts
R904	Verify JTIDS status
J597	Power down JTIDS equipment
R869	Operationally check JTIDS
R905	Verify JTIDS voice system configurations
R890	Troubleshoot JTIDS
K690	110dolesiroot 711DS
0046	ST0114 ADMIN/SUPERVISORY DUTIES
A23	Plan communications support for special missions
*******	Plan communications support for special missions Determine work priorities
A23	•• • • • • • • • • • • • • • • • • • •
A23 A8	Determine work priorities
A23 A8 E150	Determine work priorities Annotate cabinet, safe, or room security forms
A23 A8 E150 E187	Determine work priorities Annotate cabinet, safe, or room security forms Participate in staff meetings, other than conducting
A23 A8 E150 E187 C104	Determine work priorities Annotate cabinet, safe, or room security forms Participate in staff meetings, other than conducting Participate in upgrade or modifications of communications systems equipment Establish organizational policies, such as operating instructions (OIs) or standing operating procedures (SOPs)
A23 A8 E150 E187 C104 A16	Determine work priorities Annotate cabinet, safe, or room security forms Participate in staff meetings, other than conducting Participate in upgrade or modifications of communications systems equipment Establish organizational policies, such as operating instructions (OIs) or standing operating
A23 A8 E150 E187 C104 A16	Determine work priorities Annotate cabinet, safe, or room security forms Participate in staff meetings, other than conducting Participate in upgrade or modifications of communications systems equipment Establish organizational policies, such as operating instructions (OIs) or standing operating procedures (SOPs) Supervise airborne communications systems personnel (AFSC 116X0)
A23 A8 E150 E187 C104 A16 B68 C108	Determine work priorities Annotate cabinet, safe, or room security forms Participate in staff meetings, other than conducting Participate in upgrade or modifications of communications systems equipment Establish organizational policies, such as operating instructions (OIs) or standing operating procedures (SOPs) Supervise airborne communications systems personnel (AFSC 116X0) Write EPRs
A23 A8 E150 E187 C104 A16 B68 C108 B35	Determine work priorities Annotate cabinet, safe, or room security forms Participate in staff meetings, other than conducting Participate in upgrade or modifications of communications systems equipment Establish organizational policies, such as operating instructions (OIs) or standing operating procedures (SOPs) Supervise airborne communications systems personnel (AFSC 116X0) Write EPRs Adjust daily schedules to meet operational commitments
A23 A8 E150 E187 C104 A16 B68 C108 B35 A20	Determine work priorities Annotate cabinet, safe, or room security forms Participate in staff meetings, other than conducting Participate in upgrade or modifications of communications systems equipment Establish organizational policies, such as operating instructions (OIs) or standing operating procedures (SOPs) Supervise airborne communications systems personnel (AFSC 116X0) Write EPRs Adjust daily schedules to meet operational commitments Initiate equipment maintenance actions with appropriate agencies
A23 A8 E150 E187 C104 A16 B68 C108 B35 A20 C78	Determine work priorities Annotate cabinet, safe, or room security forms Participate in staff meetings, other than conducting Participate in upgrade or modifications of communications systems equipment Establish organizational policies, such as operating instructions (OIs) or standing operating procedures (SOPs) Supervise airborne communications systems personnel (AFSC 116X0) Write EPRs Adjust daily schedules to meet operational commitments Initiate equipment maintenance actions with appropriate agencies Evaluate communications operations
A23 A8 E150 E187 C104 A16 B68 C108 B35 A20 C78 B60	Determine work priorities Annotate cabinet, safe, or room security forms Participate in staff meetings, other than conducting Participate in upgrade or modifications of communications systems equipment Establish organizational policies, such as operating instructions (OIs) or standing operating procedures (SOPs) Supervise airborne communications systems personnel (AFSC 116X0) Write EPRs Adjust daily schedules to meet operational commitments Initiate equipment maintenance actions with appropriate agencies Evaluate communications operations Interpret policies, directives, or procedures for subordinates
A23 A8 E150 E187 C104 A16 B68 C108 B35 A20 C78 B60 A28	Determine work priorities Annotate cabinet, safe, or room security forms Participate in staff meetings, other than conducting Participate in upgrade or modifications of communications systems equipment Establish organizational policies, such as operating instructions (OIs) or standing operating procedures (SOPs) Supervise airborne communications systems personnel (AFSC 116X0) Write EPRs Adjust daily schedules to meet operational commitments Initiate equipment maintenance actions with appropriate agencies Evaluate communications operations Interpret policies, directives, or procedures for subordinates Plan or schedule work assignments or priorities

A 7	Determine publication requirements
A33	Schedule personnel for schools, temporary duty (TDY) assignment, or nontechnical training
E197	Review publications, correspondence, or reports
C77	Evaluate causes of mission operational discrepancies
A27	Plan or prepare briefings
C109	Write recommendations for awards or decorations
B47	Direct utilization of equipment
A22	Plan communications support for mission exercises
B 57	Implement work methods
A4	Compile data for reports
B 69	Supervise military personnel with AFSCs other than 116X0 or 118X1
A17	Establish performance standards for subordinates
B 38	Counsel personnel
C80	Evaluate individuals for promotion, demotion, reclassification, or special awards
B44	Direct operations of airborne communications platforms
B 58	Initiate actions required due to substandard performance of personnel
C75	Determine causes of mission operational discrepancies
Al	Assign personnel to duty positions
C100	Inspect personnel for compliance with military standards
A32	Schedule personnel for leaves
B 36	Conduct staff meetings or briefings
A5	Coordinate obtaining orders, passports, or visas with appropriate agencies
A 3	Classify information into categories, such as TOP SECRET, SECRET, or CONFIDENTIAL
C110	Write staff studies, surveys, or special reports, other than training reports
E189	Prepare aircraft flight or maintenance records, such as AFTO Forms 781-series forms
C97	Indorse enlisted performance reports (EPRs)
A34	Write job descriptions
B 37	Conduct supervisory orientations of newly assigned personnel
A2	Assign sponsors for newly assigned personnel
0051	ST0511 OPERATING/MAINTAINING TELETYPE EQUIPMENT
R862	Load codes in KG-84 cryptographic systems
G298	Operationally check radio teletype equipment
R870	Operationally check KG-84 cryptographic systems
H475	Transmit and receive messages by radio teletype systems
R875	Operationally check teletype communications systems
R898	Verify configurations of KG-84 cryptographic systems
K090 H494	Transmit teletype communications traffic through HF equipment
1532	Perform thruflight inspections of teletype communication systems
1532 H449	
	Reconfigure teletype equipment Troubleshoot teletype communications systems
K703	· ·
H495	Transmit teletype communications traffic through UHF equipment

0052	ST0686 PERFORMING AFSATCOM DUTIES
L735	Transmit AFSATCOM messages
L733	Prepare AFSATCOM messages for transmission
L728	Maintain AFSATCOM wideband operations
L730	Perform AFSATCOM operation equipment checks
L727	Maintain AFSATCOM narrowband operations
L718	Establish wideband nets
L716	Establish AFSATCOM links with ground stations
L706	Assume AFSATCOM net control
L715	Enter codes into command post synchronizers
L726	Initiate satellite commands
L719	Identify AFSATCOM faults
L731	Perform net control operations
L709	Configure AFSATCOM systems for TDM Mode I operations
L723	Initiate bypass mode of operations
L714	Edit AFSATCOM messages
L732	Perform selective message routing procedures
L734	Reconfigure AFSATCOM systems for operations in degraded conditions
L729	Perform AFSATCOM alternate procedures
L722	Initiate AFSATCOM line-of-sight operations
L708	Configure AFSATCOM systems for random operations
L721	Initiate AFSATCOM alternate procedures
0057	ST0224 EVALUATING DUTIES
A24	Plan equipment replacement programs
C79	Evaluate data for modification of equipment
B 50	Draft recommended changes to communication publications
C103	Participate in Transient Electromagnetic Pulse Standard (TEMPEST) certification
B 49	Draft recommendations for changes in equipment
E188	Prepare acceptance documentation for newly installed equipment
0065	ST0431 MAINTAINING FACSIMILE SYSTEMS
Can	De Como andicha in considera of Consideration
G330	Perform preflight inspections of facsimile systems
I515	Perform thruflight inspections of facsimile systems
J571	Perform postflight inspections of facsimile systems
K683	Troubleshoot facsimile systems
K647	Remove or replace assemblies of facsimile systems

0067	ST0329 COORDINATING WITH DIPLOMATIC AGENCIES
H431	Perform CSS actions
H442	Prepare messages using White House format
F208	Coordinate flight information with State Department communications center
H440	Prepare messages using State Department format
F209	Coordinate flight information with Treasury Department communications center
H441	Prepare messages using Treasury format
0069	ST0713 PREFLIGHTING FLIGHT EQUIPMENT
G318	Perform preflight inspections of altitude alerting systems
G319	Perform preflight inspections of autopilot systems
G334	Perform preflight inspections of ground proximity warning systems
G344	Perform preflight inspections of polar pass compass systems
G328	Perform preflight inspections of emergency gyroscopes (GYROs)
G361	Perform preflight inspections of weather radar
I522	Perform thruflight inspections of navigation systems
I524	Perform thruflight inspections of polar pass compass systems
G354	Perform preflight inspections of standby GYROs
1536	Perform thruflight inspections of weather radar